

This document was too large to scan as a whole document, therefore it required breaking into smaller sections.

Document number: SD-WM-DP-135

Section 1 of 2

Title: 90 DAY SAFETY SCREEN RESULTS and FINAL
REPORT For TANK 241-BX-103, PUSH MODE,
CORES 86 and 87

Date: 9/07/95 Revision: 1

Originator: KEVIN E. BELL
Co: WHC

Recipient: _____
Co: _____

References: ECN-623834

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ENGINEERING CHANGE NOTICE

Page 1 of 2

1. ECN **Nº 623834**Proj.
ECN

2. ECN Category (mark one) Supplemental <input type="checkbox"/> Direct Revision <input checked="" type="checkbox"/> Change ECN <input type="checkbox"/> Temporary <input type="checkbox"/> Standby <input type="checkbox"/> Supersedure <input type="checkbox"/> Cancel/Void <input type="checkbox"/>	3. Originator's Name, Organization, MSIN, and Telephone No. Kevin E. Bell/Characterization Plans, Coordination and Reports/T6-06/373-1629 5. Project Title/No./Work Order No. Tank 241-BX-103, Push Mode, Cores 86 and 87 8. Document Numbers Changed by this ECN (includes sheet no. and rev.) WHC-SD-WM-DP-135, Rev. 0	3a. USQ Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 6. Bldg./Sys./Fac. No. N/A 9. Related ECN No(s). N/A	4. Date 08/22/95 7. Approval Designator Q 10. Related PO No. N/A
11a. Modification Work <input type="checkbox"/> Yes (fill out Blk. 11b) <input checked="" type="checkbox"/> No (NA Blks. 11b, 11c, 11d)	11b. Work Package No. N/A	11c. Modification Work Complete N/A Cog. Engineer Signature & Date	11d. Restored to Original Condition (Temp. or Standby ECN only) N/A Cog. Engineer Signature & Date
12. Description of Change This ECN is being generated in order to update/add additional information to the existing document.			
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ECN-623834

A-7900-013-3 (11/94) GEF096

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Document Number: WHC-SD-WM-DP-135, REV 1

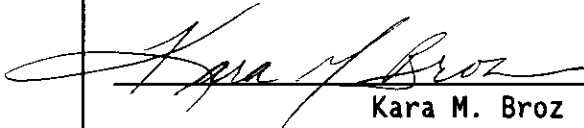
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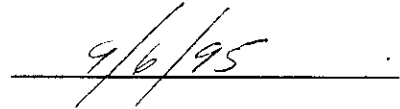
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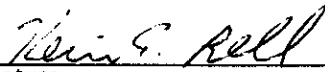
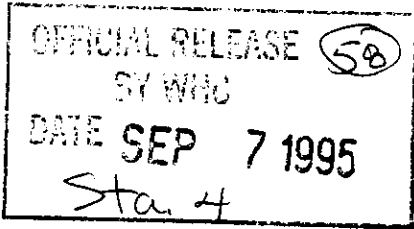
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SUPPORTING DOCUMENT1. Total Pages **240**

2. Title 90-Day Safety Screen Results and Final Report for Tank 241-BX-103, Push Mode, Cores 86 and 87	3. Number WHC-SD-WM-DP-135	4. Rev No. 1
5. Key Words 90-Day, Safety Screen, Safety Screen Results, Final Report, Tank 241-BX-103, Tank BX-103, BX-103, Push Mode, Core 86, Core 87	6. Author Name: Kevin E. Bell  Signature Organization/Charge Code 75310/MDR21	
7. Abstract N/A		
8. RELEASE STAMP  <p>OFFICIAL RELEASE (58) BY WHC DATE SEP 7 1995 Sta 4</p>		

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RECORD OF REVISION

(1) Document Number

WHC-SD-WM-DP-135

Page A

(2) Title

90-Day Safety Screen Results and Final Report for Tank 241-BX-103, Push Mode, Cores 86 and 87

CHANGE CONTROL RECORD

Authorized for Release

(3) Revision

(4) Description of Change - Replace, Add, and Delete Pages

(5) Cog. Engr.

(6) Cog. Mgr. _____ Date _____

0

(7) Initially released 07/18/95 on EDT-612167.

K.E. Bell

J.G. Kristofzski

RS 1

Incorporate per ECN-623834.

K.E. Bell

J.G. Kristofzski

Kevin Reed

John A. 5/31/85

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P.O. Box 1970 Richland, WA 99352

WHC-SD-WM-DP-135, REV. 1

ANALYTICAL SERVICES

90-DAY SAFETY SCREEN RESULTS AND FINAL REPORT FOR TANK
241-BX-103 PUSH-MODE, CORES 86 AND 87

Date Printed:

AUGUST 23, 1995

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PART I

WHC-SD-WM-DP-135, REV. 1

**90-DAY SAFETY SCREEN RESULTS AND FINAL REPORT FOR TANK
241-BX-103 PUSH-MODE, CORES 86 AND 87**

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NARRATIVE

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**90-DAY AND FINAL REPORT FOR TANK 241-BX-103
PUSH-MODE CORE SAMPLES 86 AND 87.**

1.0 INTRODUCTION AND SUMMARY

This is the 90-day and final report for the fiscal year 1995 tank 241-BX-103 (BX-103) push-mode characterization effort. It transmits additional extrusion information and analytical data not provided in the 45-day report (Bell 1995a) and includes all raw analytical data not reported in that reference. Also included in this data package for each segment extruded are copies of the chain of custody forms, hot cell work plans, extrusion reports, photographs, subsampling worksheets, and Labcore sample numbers.

Drainable liquids and the field blank from tank BX-103 were analyzed directly at the segment level for energetics by differential scanning calorimetry (DSC) and percent water by thermal gravimetric analysis (TGA). In addition, the presence or absence of any separable, presumably organic, layer in liquid samples was noted and none was observed. Solid samples were analyzed directly at the half segment level for energetics by DSC and percent water by TGA. Total alpha activity was determined on fusion digestions of the solid subsamples. Analytical results for all DSC, TGA, and total alpha analyses were reported in Bell (1995a). No notification limits were exceeded on any analyses. However, the percent water by TGA was less than 25% on the upper half of segment 2 of core 87, therefore percent water by gravimetry was performed on that sample as requested in Johnson (1995).

2.0 SAMPLE RECEIPT AND EXTRUSION

Core samples 86 and 87 from tank BX-103, obtained by the push-mode core sampling method, were received by the 222-S Laboratories. Each core consisted of two segments. Both core samples and the field blank were extruded, subsampled, and analyzed in accordance with the BX-103 tank characterization plan (TCP)(Bell 1995b). Copies of the chain of custody forms associated with each of the samples are provided as Attachment 1.

Extrusions of core samples 86, 87, and the field blank took place on May 31, June 5, and June 5, 1995 respectively. Details of the extrusions are provided in hot cell work plans that were followed for each of the segments extruded. Copies of the completed hot cell work plans are included as Attachment 2. Pertinent extrusion information is provided in extrusion reports; included as Attachment 3.

Color photographs were taken of each segment immediately following extrusion. Black and white photocopies of these photographs are included as Attachment 4, however the original pictures are kept on file and may be viewed by contacting Program Support at the 222-S Laboratory.

3.0 SUBSAMPLING

As indicated above, material from each extruded segment was subsampled into sample jars as directed in (Bell 1995b). Aliquots for analysis were removed from these jars and placed into sample vials as prescribed in subsampling worksheets. Copies of these worksheets are included as Attachment 5. The identity of the sample jars and aliquot vials, subsample and aliquot weights, and Labcore sample numbers (See Section 4.0.) associated with each sample are summarized in Tables 1A and 1B below.

4.0 ANALYTICAL RESULTS

Analytical results were tracked and reported using the laboratory information management system known as Labcore. Each aliquot taken for analysis has a unique sample number and sample identification. A listing of each Labcore sample number and affiliated test associated with this sampling and analysis project is provided as Attachment 6. The last item in the attachment is a description of the test acronyms.

Additional extrusion results are presented in Table 2, and the percent water by gravimetry results are presented in Table 3. These tables include the LabCore sample numbers. Data in Table 2 is physical data, such that standards, blanks, duplicates, and spikes do not apply. Checks to ensure analytical balances are in calibration were performed and this information is present in the raw data.

4.1 PERCENT WATER BY GRAVIMETRY

Weight percent water was performed by gravimetry on the upper half of segment 2, core 87 using procedure LA-564-101, Rev. E-3. Initial results were 17.38 and 32.44 % water for the sample and duplicate, respectively. The analysis was re-run due to the high relative percent difference between the sample and duplicate results. The average of the sample and duplicate determination of the re-run was 23.50% water, which compares very well with the results determined by TGA (23.14%).

5.0 REFERENCES

- Bell, K. E., 1995a, *45-Day Safety Screen Results for Tank 241-BX-103, Push-Mode, Cores 86 and 87*, WHC-SD-WM-DP-135, Rev. 0, Westinghouse Hanford Company, Richland, Washington.
- Bell, K. E., 1995b, *Tank 241-BX-103 Tank Characterization Plan*, WHC-SD-WM-TP-339, Rev. O, Westinghouse Hanford Company, Richland Washington.
- Johnson, G. D., 1995, "Action Item for Laboratory Restart", Internal Memo dated June 23, 1995 from Safety Engineering to J. G. Kristofzski.

Project Coordinator: Kevin E. Bell

Table 1A. Subsampling and Sample Load-Out Information
for Tank BX-103, Core 86.

Segment	Subsample Location	Original Vial or Jar	Original wt (g)	Transferred to vial or jar	Aliquot wt (g)	LabCore Sample #
1	liner liq.	vial 7173	< 5 mL	vial destroyed	n/a	S95T001012
1	drn. liq.	jar 6945	221.71	vial 6997 ¹	9.64	S95T001014,1019,1032
1	drn. liq. archive	jar 6945	221.71	vial 7183	47.34	S95T001030
1	UH solids	jar 6796	33.91	vial 7052	6.79	S95T001016,1021,1024
1	UH solids archive	jar 6796	33.91	vial 7181	16.59	S95T001027
2	liner liq.	vial 7179	< 5 mL	vial destroyed	n/a	S95T001013
2	drn. liq.	jar 6947	21.39	vial 7055 ²	10.05	S95T001015,1020,1033
2	drn. liq. archive	jar 6947	21.39	vial 7184	3.60	S95T001031
2	UH solids	jar 6797	86.68	vial 7053	9.31	S95T001018,1023,1026
2	UH solids archive	jar 6797	86.68	vial 7182	64.80	S95T001029
2	LH solids	jar 7138	195.54	vial 7056	8.40	S95T001017,1022,1025
2	LH solids archive	jar 7138	194.54	vial 7185	55.95	S95T001028

Notes:

¹Because of its turbidity, an aliquot from jar 6945 was centrifuged for approximately 1 hr. before the clarified liquid was decanted into vial 6997.

²Because of its turbidity, an aliquot from jar 6947 was centrifuged for approximately 1 hr. before the clarified liquid was decanted into vial 7055.

drn. liq. - drainable liquid
 liner liq. - liner liquid
 UH - upper half of segment
 LH - lower half of segment

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Table 1B. Subsampling and Sample Load-Out Information
for Tank BX-103, Core 87.

Segment	Subsample Location	Original Vial or Jar	Original wt (g)	Transferred to vial or jar	Aliquot wt (g)	LabCore Sample #
1	drn. liq.	jar 7140	214.51	vial 7059 ¹	15.36	S95T001523,1034,1043
1	drn. liq. archive	jar 7140	214.51	vial 7193	49.14	S95T001530
1	UH solids	jar 7070	70.10	vial 7061	8.84	S95T001525,1038,1041
1	UH solids archive	jar 7070	70.10	vial 7195	51.34	S95T001532
1	LH solids	jar 6799	24.54	vial 7057	7.27	S95T001524,1037,1042
1	LH solids archive	jar 6799	24.54	vial 7192	7.23	S95T001531
2	drn. liq.	vial 7169	18.25	vial 7058 ²	16.31	S95T001526,1035,1044
2	UH solids	jar 7141	244.71	vial 7060	10.39	S95T001527,1039,1040
2	UH solids archive	jar 7141	244.71	vial 7194	69.01	S95T001533
FB	drn. liq.	jar 7139	238.69	no transfer	n/a	S95T001529
FB	drn. liq.	jar 6798	39.34	vial 7191	38.02	S95T001528, 1036

Notes:

¹Because of its turbidity, an aliquot from jar 7040 was centrifuged for approximately 1 hr. before the clarified liquid was decanted into vial 7059.

²Because of its turbidity, the contents of vial 7169 were centrifuged for approximately 1 hr. before the clarified liquid was decanted into vial 7058.

drn. liq. - drainable liquid
 liner liq. - liner liquid
 UH - upper half of segment
 LH - lower half of segment
 FB - field blank

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Table 2. BX-103 Extrusion Summary - Cores 86 and 87.
BX-103

CORE NUMBER: 86
SEGMENT #: 1

SEGMENT PORTION: W Whole Segment

Sample#	R	A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T000970			Solids Recovered - Weight	g	n/a	n/a	33.00	n/a	n/a	n/a	n/a	1.00e-02	n/a
S95T000970			Organic Vol Present / hotcell	ml	n/a	n/a	0.00e+00	n/a	n/a	n/a	n/a	n/a	n/a
S95T000970			Notebook with source data		n/a	n/a	N-1173	n/a	n/a	n/a	n/a	n/a	n/a
S95T000970			Liner Liquid Recoverd - Weight	g	n/a	n/a	< 5	n/a	n/a	n/a	n/a	n/a	n/a
S95T000970			Extrusion of a Segment		n/a	n/a	complete	n/a	n/a	n/a	n/a	n/a	n/a
S95T000970			Drainable Liquid Recoverd - Wt	g	n/a	n/a	221.0	n/a	n/a	n/a	n/a	n/a	n/a

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Table 2. BX-103 Extrusion Summary - Cores 86 and 87.
BX-103

CORE NUMBER: 86
SEGMENT #: 2

SEGMENT PORTION: W Whole Segment

Sample#	R	A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T000971			Solids Recovered - Weight	g	n/a	n/a	282.0	n/a	n/a	n/a	n/a	1.00e-02	n/a
S95T000971			Organic Vol Present / hotcell	mL	n/a	n/a	0.00e+00	n/a	n/a	n/a	n/a	n/a	n/a
S95T000971			Notebook with source data		n/a	n/a	N-1173	n/a	n/a	n/a	n/a	n/a	n/a
S95T000971			Liner Liquid Recoverd - Weight	g	n/a	n/a	< 5	n/a	n/a	n/a	n/a	n/a	n/a
S95T000971			Extrusion of a Segment		n/a	n/a	complete	n/a	n/a	n/a	n/a	n/a	n/a
S95T000971			Drainable Liquid Recoverd - Wt	g	n/a	n/a	21.00	n/a	n/a	n/a	n/a	n/a	n/a

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Table 2. BX-103 Extrusion Summary - Cores 86 and 87.
BX-103

CORE NUMBER: 87
SEGMENT #: 1

SEGMENT PORTION: W Whole Segment

Sample#	R	A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001004			Solids Recovered - Weight	g	n/a	n/a	94.00	n/a	n/a	n/a	n/a	1.00e-02	n/a
S95T001004			Organic Vol Present / hotcell	mL	n/a	n/a	0.00e+00	n/a	n/a	n/a	n/a	n/a	n/a
S95T001004			Notebook with source data		n/a	n/a	N-1173	n/a	n/a	n/a	n/a	n/a	n/a
S95T001004			Liner Liquid Recoverd - Weight	g	n/a	n/a	0.00e+00	n/a	n/a	n/a	n/a	n/a	n/a
S95T001004			Extrusion of a Segment		n/a	n/a	complete	n/a	n/a	n/a	n/a	n/a	n/a
S95T001004			Drainable Liquid Recoverd - Wt	g	n/a	n/a	214.0	n/a	n/a	n/a	n/a	n/a	n/a

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Table 2. BX-103 Extrusion Summary - Cores 86 and 87.
BX-103

CORE NUMBER: 87
SEGMENT #: 2

SEGMENT PORTION: W Whole Segment

Sample#	R	A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001005			Solids Recovered - Weight	g	n/a	n/a	244.0	n/a	n/a	n/a	n/a	1.00e-02	n/a
S95T001005			Organic Vol Present / hotcell	ml	n/a	n/a	0.00e+00	n/a	n/a	n/a	n/a	n/a	n/a
S95T001005			Notebook with source data		n/a	n/a	N-1173	n/a	n/a	n/a	n/a	n/a	n/a
S95T001005			Liner Liquid Recoverd - Weight	g	n/a	n/a	< 5	n/a	n/a	n/a	n/a	n/a	n/a
S95T001005			Extrusion of a Segment		n/a	n/a	complete	n/a	n/a	n/a	n/a	n/a	n/a
S95T001005			Drainable Liquid Recoverd - Wt	g	n/a	n/a	18.00	n/a	n/a	n/a	n/a	n/a	n/a

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Table 2. BX-103 Extrusion Summary - Cores 86 and 87.
BX-103

CORE NUMBER: 87
SEGMENT #: Field Blank

SEGMENT PORTION: W Whole Segment

Sample#	R	A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001006			Solids Recovered - Weight	g	n/a	n/a	1.00e-02	n/a	n/a	n/a	n/a	1.00e-02	n/a
S95T001006			Organic Vol Present / hotcell	ml	n/a	n/a	0.00e+00	n/a	n/a	n/a	n/a	n/a	n/a
S95T001006			Notebook with source data		n/a	n/a	N-1173	n/a	n/a	n/a	n/a	n/a	n/a
S95T001006			Liner Liquid Recoverd - Weight	g	n/a	n/a	0.00e+00	n/a	n/a	n/a	n/a	n/a	n/a
S95T001006			Extrusion of a Segment		n/a	n/a	complete	n/a	n/a	n/a	n/a	n/a	n/a
S95T001006			Drainable Liquid Recoverd - Wt	g	n/a	n/a	280.6	n/a	n/a	n/a	n/a	n/a	n/a

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Table 3. BX-103 Analytical Summary - Cores 86 and 87.
BX-103

CORE NUMBER: 87
SEGMENT #: 2

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001039			% Water by Gravimetric	%	98.76	n/a	23.60	23.40	23.50	0.85	n/a	1.00e-02	n/a

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ATTACHMENT 1

CHAIN OF CUSTODY FORMS

CHAIN-OF-CUSTODY RECORD FOR CORE SAMPLING

(1) Shipment Number SP-95-017 (2) Sample Number 95-081 (3) Supervisor M.C. Jones
 (4) Tank BX-103 (5) Rise 7 (6) Segment 1 (7) Core 086 (8) Cask Serial Number C1035

Radiation Survey Data:		(9) FIELD	(33) LABORATORY	(10) Shipment Description	
Over Top Dose Rate	<u>1 mR/hr</u>	<u>< 5 mR/hr</u>	A. Work Package Number	<u>ES-95-00194</u>	
Side Dose Rate	<u>7 mR/hr</u>	<u>9 mR/hr</u>	B. Cask Seal Number	<u>2353</u>	
Bottom Dose Rate	<u>1 mR/hr</u>	<u>6 mR/hr</u>	C. Sampler Serial Number	<u>94-294</u>	
Smearable Contamination	<u>< 20</u>	<u>< 20 dpm/100cm²</u>	D. Date and Time Sampler Unseated	<u>5/24/95 - 13:25</u>	
	(Alpha)	(Alpha)	E. Expected Liquid Content	<u>30%</u>	
	<u>< 1K</u>	<u>< 1000 dpm/100cm²</u>	F. Expected Solid Content	<u>70%</u>	
	(Beta-Gamma)	(Beta-Gamma)	G. Dose Rate Through Drill String	<u>350 mR/hr.</u>	
RCT (HPT)	<u>J. Brewer</u>	RCT (HPT)	H. Expected Sample Length	<u>4"</u>	
	(Signature)				

(11) INFORMATION (Include statement of laboratory tests to be performed.)

Perform TEST per. WHC-SD-WM-TP-339

(12) Field Comments

First sample was only 4" long.

(34) Laboratory Comments

(13) Point of Origin <u>BX-103</u>	(14) Destination <u>222-S</u>	(15) Sender Name (Sign and PRINT) <u>M.C. Jones</u>	(16) Date/Time <u>5-24-95 12:55</u>	(17) Sender Comments
(19) Relinquished By (Sign and PRINT) <u>M.C. Jones</u>	(20) Received By (Sign and PRINT) <u>Chris Boyd</u>	(21) Date/Time <u>5-26-95 12:55</u>	(22) Receiver Comments	
(23) Relinquished By (Sign and PRINT) <u>Chris Boyd</u>	(24) Received By (Sign and PRINT) <u>Arthur B. Berry</u>	(25) Date/Time <u>5-26-95 13:58</u>	(26) Receiver Comments	
(27) Relinquished By (Sign and PRINT)	(28) Received By (Sign and PRINT)	(29) Date/Time	(30) Receiver Comments	

(18) Seal Intact Upon Release?

☒ Yes ☐ No

(31) Seal Intact Upon Receipt?

☒ Yes ☐ No

(32) Seal Data Consistent with this Record?

Shipment No.

☒ Yes ☐ No

Cask Seal No.

☒ Yes ☐ No

Sample No.

☒ Yes ☐ No

CHAIN-OF-CUSTODY RECORD FOR CORE SAMPLING

(1) Shipment Number SP-95-017 (2) Sample Number 95-082 (3) Supervisor M. C. JONES
 (4) Tank BX-103 (5) Riser 7 (6) Segment 2 (7) Core 86 (8) Cask Serial Number C-1049

Radiation Survey Data:		(9) FIELD	(33) LABORATORY	(10) Shipment Description	
Over Top Dose Rate	<u>1 MR/HR</u>		<u>0.5 MR/HR</u>	A. Work Package Number	<u>ES-95-00194</u>
Side Dose Rate	<u>7 MR/HR</u>		<u>10 MR/HR</u>	B. Cask Seal Number	<u>1710</u>
Bottom Dose Rate	<u>1 MR/HR</u>		<u>1.5 MR/HR</u>	C. Sampler Serial Number	<u>94-291</u>
Smearable Contamination	<u><20</u>		<u><20 dpm/100cm²</u>	D. Date and Time Sampler Unseated	<u>5/26/95 10:05</u>
	(Alpha)		(Alpha)	E. Expected Liquid Content	<u>30%</u>
	<u><1K</u>		<u><1000 dpm/100cm²</u>	F. Expected Solid Content	<u>70%</u>
	(Beta-Gamma)		(Beta-Gamma)	G. Dose Rate Through Drift String	<u>500 MR/HR</u>
RCT* (HPT)	<u>[Signature]</u>	RCT* (HPT)	<u>[Signature]</u>	H. Expected Sample Length	<u>19"</u>
	(Signature)		(Signature)		

(11) INFORMATION (Include statement of laboratory tests to be performed.)

1
01

PERFORM TEST TO WHC-SD-WM-TP-339

(12) Field Comments		(34) Laboratory Comments			
(13) Point of Origin <u>BX-103</u>	(14) Destination <u>222-S</u>	(15) Sender Name (Sign and PRINT) <u>M. C. Jones</u>		(16) Date/Time <u>5-25-95 12:55</u>	(17) Sender Comments
(19) Relinquished By (Sign and PRINT) <u>[Signature]</u>		(20) Received By (Sign and PRINT) <u>[Signature]</u>		(21) Date/Time <u>6-26-95</u>	(22) Receiver Comments
(23) Relinquished By (Sign and PRINT) <u>[Signature]</u>		(24) Received By (Sign and PRINT) <u>[Signature]</u>		(25) Date/Time <u>5-26-95 13:50</u>	(26) Receiver Comments
(27) Relinquished By (Sign and PRINT)		(28) Received By (Sign and PRINT)		(29) Date/Time	(30) Receiver Comments
(18) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		(31) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		(32) Seal Data Consistent with this Record? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Shipment No. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Cask Seal No. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Sample No. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

WHC-SD-WM-DP-130, REV. 1

CHAIN-OF-CUSTODY RECORD FOR CORE SAMPLING

COPY

1) Shipment Number SP-95-018 (2) Sample Number 95-083 (3) Supervisor D. Hartley
 4) Tank 241-BX-103 (5) Rise 2 (6) Segment 2/1 (7) Core 087 (8) Cask Serial Number C1034

Irradiation Survey Data:		(9) FIELD	(33) LABORATORY	(10) Shipment Description	
Over Top Dose Rate	<u>4.5 mrem/hr</u>		<u>40.5 mrem/hr</u>	A. Work Package Number	<u>ES-95-194</u>
Side Dose Rate	<u>1.2 mrem/hr</u>		<u>10 mrem/hr</u>	B. Cask Seal Number	<u>1208</u>
Bottom Dose Rate	<u>10 mrem/hr</u>		<u>9 mrem/hr</u>	C. Sampler Serial Number	<u>94-289</u>
Smearable Contamination	<u>420 DPM/100CM²</u> (Alpha)		<u>420 DPM/100CM²</u> (Alpha)	D. Date and Time Sampler Unseated	<u>5-30-95, 1406</u>
	<u>4100 DPM/100CM²</u> (Beta-Gamma)		<u>4100 DPM/100CM²</u> (Beta-Gamma)	E. Expected Liquid Content	<u>30%</u>
RCT* (HPT)	<u>DAVID DOCKSON</u> (Signature)	RCT* (HPT)	<u>[Signature]</u> (Signature)	F. Expected Solid Content	<u>70%</u>
				G. Dose Rate Through Drill String	<u>440 mrem/hr</u>
				H. Expected Sample Length	<u>1911</u>

(11) INFORMATION (Include statement of laboratory tests to be performed.)

WHE-9D-WM-TP-339

(12) Field Comments

(34) Laboratory Comments

(13) Point of Origin <u>241BX103</u>	(14) Destination <u>2225</u>	(15) Sender Name (Sign and PRINT) <u>D. Hartley</u>	(16) Date/Time <u>6-1-95 11:20</u>	(17) Sender Comments
(19) Relinquished By (Sign and PRINT) <u>D. Hartley</u>	(20) Received By (Sign and PRINT) <u>[Signature]</u>	(21) Date/Time <u>6-1-95 11:20</u>	(22) Receiver Comments	
(23) Relinquished By (Sign and PRINT) <u>[Signature]</u>	(24) Received By (Sign and PRINT) <u>[Signature]</u>	(25) Date/Time <u>6-1-95 12:15</u>	(26) Receiver Comments	
(27) Relinquished By (Sign and PRINT)	(28) Received By (Sign and PRINT)	(29) Date/Time	(30) Receiver Comments	

(18) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(31) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(32) Seal Data Consistent with this Record?
Shipment No. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Cask Seal No. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sample No. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

CHAIN-OF-CUSTODY RECORD FOR CORE SAMPLING

COPY

(1) Shipment Number SP-95-018 (2) Sample Number 95-084 (3) Supervisor M. C. Jones
 (4) Tank BX-103 (5) Riser 2 (6) Segment 2 (7) Core 087 (8) Cask Serial Number G-1045

Radiation Survey Date:		(9) FIELD	(13) LABORATORY	(10) Shipment Description
Over Top Dose Rate	<u>2.5 mrem/hr</u>	<u>20.5 AREM/HR</u>	A. Work Package Number	<u>ES-95-0194</u>
Side Dose Rate	<u>8 mrem/hr</u>	<u>7 AREM/HR</u>	B. Cask Seal Number	<u>1712</u>
Bottom Dose Rate	<u>8 mrem/hr</u>	<u>4 AREM/HR</u>	C. Sampler Serial Number	<u>94-287</u>
Smearable Contamination	<u>< 20 DPM/100 CM²</u> (Alpha)	<u>< 20 DPM/100 CM²</u> (Alpha)	D. Date and Time Sampler Unseated	<u>5-30-95 / 18147</u>
	<u>< 1000 DPM/100 CM²</u> (Beta-Gamma)	<u>< 1000 DPM/100 CM²</u> (Beta-Gamma)	E. Expected Liquid Content	<u>30%</u>
RCT* <u>David Dodson</u> (HPT) (Signature)		RCT* <u>[Signature]</u> (HPT) (Signature)	F. Expected Solid Content	<u>70%</u>
			G. Dose Rate Through Drill String	<u>320 MR/HR</u>
			H. Expected Sample Length	<u>16 3/4"</u>

(11) INFORMATION (Include statement of laboratory tests to be performed.)

(12) Field Comments

NO HEAD FLUID WAS USED. BOTTOM ALARM
WENT OFF 16 3/4" INTO THE STRIKE

(13) Laboratory Comments

(13) Point of Origin <u>BX-103</u>	(14) Destination <u>222-S</u>	(15) Sender Name (Sign and PRINT) <u>Robert D. Hartley</u>	(16) Date/Time <u>6-1-95 11:20</u>	(17) Sender Comments
(19) Relinquished By (Sign and PRINT) <u>[Signature]</u>	(20) Received By (Sign and PRINT) <u>[Signature]</u>	(21) Date/Time <u>6-1-95 11:20</u>	(22) Receiver Comments	
(23) Relinquished By (Sign and PRINT) <u>[Signature]</u>	(24) Received By (Sign and PRINT) <u>[Signature]</u>	(25) Date/Time <u>6-1-95 12:15</u>	(26) Receiver Comments	
(27) Relinquished By (Sign and PRINT)	(28) Received By (Sign and PRINT)	(29) Date/Time	(30) Receiver Comments	

(18) Seal Intact Upon Release?

☒ Yes ☐ No

(31) Seal Intact Upon Receipt?

☒ Yes ☐ No

(32) Seal Data Consistent with this Record?

Shipment No.
☒ Yes ☐ No

Cask Seal No.
☒ Yes ☐ No

Sample No.
☒ Yes ☐ No

CHAIN-OF-CUSTODY RECORD FOR CORE SAMPLING

COPY

(1) Shipment Number SP-95-018 (2) Sample Number BLANK (3) Supervisor M. C. Jones
 (4) Tank BX-103 (5) Riser 2 (6) Segment BLANK (7) Core 087 (8) Cask Serial Number C-1055

Radiation Survey Data:		(9) FIELD	(33) LABORATORY	(10) Shipment Description
Over Top Dose Rate	<u>.5 mrem/hr</u>		<u>LO.5 MREM/HR</u>	A. Work Package Number <u>ES-95-0194</u>
Side Dose Rate	<u>.5 mrem/hr</u>		<u>LO.5 MREM/HR</u>	B. Cask Seal Number <u>1713</u>
Bottom Dose Rate	<u>.5 mrem/hr</u>		<u>LO.5 MREM/HR</u>	C. Sampler Serial Number <u>94-290</u>
Smearable Contamination	<u>220 DPM/100cm²</u>		<u>220 DPM/100cm²</u>	D. Date and Time Sampler Unseated <u>5-30-95 / 19:10</u>
	(Alpha)		(Alpha)	E. Expected Liquid Content <u>100%</u>
	<u>11000 DPM/100cm²</u>		<u>11000 DPM/100cm²</u>	F. Expected Solid Content <u>0%</u>
	(Beta-Gamma)		(Beta-Gamma)	G. Dose Rate Through Drill String <u>0</u>
RCT* (HPT)	<u>David Dodson</u>	RCT* (HPT)	<u>[Signature]</u>	H. Expected Sample Length <u>19"</u>
	(Signature)		(Signature)	

(11) INFORMATION (Include statement of laboratory tests to be performed.)

(12) Field Comments <u>no mcs</u>		(34) Laboratory Comments	
(13) Point of Origin <u>103 BX</u>	(14) Destination <u>222</u>	(15) Sender Name (Sign and PRINT) <u>D. Hartley D. Hartley</u>	(16) Date/Time <u>6-1-95</u>
(19) Relinquished By (Sign and PRINT) <u>D. Hartley D. Hartley</u>	(20) Received By (Sign and PRINT) <u>Chas. E. Byrd C. E. Byrd</u>	(21) Date/Time <u>6-1-95</u>	(17) Sender Comments
(23) Relinquished By (Sign and PRINT) <u>Chas. E. Byrd C. E. Byrd</u>	(24) Received By (Sign and PRINT) <u>N. LAPIERS</u>	(25) Date/Time <u>6-1-95 12:20</u>	(22) Receiver Comments
(27) Relinquished By (Sign and PRINT)	(28) Received By (Sign and PRINT)	(29) Date/Time	(26) Receiver Comments
(30) Receiver Comments			
(18) Seal Intact Upon Release? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(31) Seal Intact Upon Receipt? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(32) Seal Data Consistent with this Record? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Shipment No. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Cask Seal No. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample No. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

WHC-SD-WM-DP-135, REV. 1

ATTACHMENT 2

HOT CELL WORK PLANS

Hot Cell Workplan - Push/Rotary ModeTank: 6X-103 Core: 86 Segment: 1 Riser: 7

Date: 05-31-95
 TCP Number: WHC-SD-WM-DP-339
 Sample Number: 95-081
 Cask Number: C1035
 Logbook Number: WHC-N-1173
 PC Name: Kevin Bell Telephone: 373-1629

A. Sample Receipt and Storage

- EC 1. Sample/Cask Receipt (procedure LO-090-101) from Door 10.
EC 2. Make 3 copies of the chain of custody. (Project Coordinator, Hot Cell Workplan, and Logbook).
EC 3. Record dose rate thru drill string: Dose rate = 350 mR/hr
EC 4. Place cask in short term storage.
EC 5. Update the SAMPLER/AUGER LOG-IN SHEET.
EC 6. Update the SAMPLER/AUGER LOAD-IN SHEET.
EC 7. Attach chain of custody to the hot cell workplan.
EC 8. Transfer hotcell workplan to Pre-Extrusion Preparation file.

B. Pre-Extrusion Preparation

- EC 1. Prepare folder to consolidate papers for extrusion.
RD 2. Prepare jars/vials needed for extrusion.
EC 3. Project coordinator (PC) shall input sample into labcore.
EC 4. PC shall generate labels for cask and liner.
EC 5. Attach labels to appropriate cask.
EC 6. Generate Batch for required segment that includes the following tests: Batch #: 95001368
- DLIQVOL1 (Drainable liquid volume)
 - DLIQWT01 (Drainable liquid weight)
 - EST.G/ML (Estimated Density)
 - EXTRUD01 (Extrusion information)
 - LLIQWT01 (Liner liquid weight)
 - NOTEBOOK (Notebook number)
 - SLDVOL01 (Estimated solid volume)
 - SLDWT-01 (Solid weight)

SC

7. If required by project coordinators, generate a batch that includes the following tests: Batch #: 95001369

- a. ORGVOL01 (Organic Volume)
b. FSLDWT01 (Filterable solid weight)

SC

8. Generate a Worklist that includes the batches previously prepared.

- a. Worklist number 1462
b. Labcore number 595+000170

SC

9. Attach copy of worklist to the hot cell workplan.

SC

10. Transfer hot cell work plan to Cask Receipt and Preparation file.

C. Cask Receipt and Preparation.

SC

1. Receive cask from sample custodian (LO-090-101).

TR0

2. Perform section 5.6 of LO-161-172, Preparation of 11A-1A Hot Cell and Hood For Cask Disassembly.

TR0

3. Prepare cask according to section B of procedure LO-160-101.

TR0

4. Perform the following:
a. Sampler load-in (LO-161-172)
b. Liner load-out (if required)
c. Homogenized sample load-out (if required)
d. Jar load-in (if required).

TR0

5. Record the date the cask was loaded in on the SAMPLER/AUGER LOAD-IN SHEET.

TR0

6. Decon cask and prepare for return to tank farms.

TR0

7. Transfer hot cell work plan to Extrusion file.

D. Extrusion

RKF

1. Prepare logbook for extrusion.
a. Update table of contents RKF
b. Chain of custody in place RKF

TR0

2. Pre-weigh all jars for the extrusion/subsampling operation.

TR0

3. Check video equipment and ensure battery is charged.

TR0

4. Prepare the start of the video tape by recording a label of the tank, segment, and date:

- a. Tape Number #8 Title BX-FARM

TR0

5. Contact PC and inform of extrusion.

- TRD 6. Contact Building Shift Manager for Waste Tank Volume information (Tank 101).
 a. Shift manager contacted Glenn Wallly
 b. Date/Time 08:00 5-31-95
- TRD 7. Record hot cell temperature and humidity
 a. Temperature 78.3° F Humidity 31%
- TRD 8. Balance check with 20 and 500 gram weights:
 a. 20 gm = 20.00 gms 500 gm = 499.98 gms
- TRD 9. Obtain initial weight of liner liquid jar before collecting the liner liquid. Complete the information below after collecting liner liquid.
- | | | | | |
|----|--------------------------------|--------------|----|-------|
| a. | Is liner liquid present? | <u>YES</u> | or | NO |
| b. | Jar/vial number: | <u>7173</u> | | |
| c. | Jar/vial size: | <u>40</u> | | mLs |
| d. | Final wt of liner liquid jar | <u>26.03</u> | | grams |
| e. | Initial wt of liner liquid jar | <u>25.30</u> | | grams |
| f. | Net wt of liner liquid jar | <u>.73</u> | | grams |
- g. Record physical characteristics:
clear - yellow no solids, AQUEOUS
- (DISCARDED
VIAL 7173
< 3mLs of
LIQUID)
- TRD 10. Verify the sampler serial # is the same as listed on the chain of custody.
 Sampler serial #: 94-294
- TRD 11. Extrude sample according the appropriate section (push mode or rotary mode) in procedure LO-160-103.
 a. Document the following information:
 (1) Valve OPEN or CLOSED before cutting cables.
 (a) Time: 12:53
 (2) Valve OPEN or CLOSED after cutting cables.
 (a) Time: 12:59
- TRD 12. Document the date and time the sampler valve opened:
 a. Date: 05-31-95
 b. Time: 13:06

TRD

13. Document the following information during the extrusion. Document time the video and Hasselblad photographs are obtained in steps 13 and 14.

a. Description of Drainable Liquids:

APPROX. 210mls OF DRAINABLE LIQUID, DARK BLACK IN COLOR

b. Description of Solids:

BLACK - RUNNY - BRAINY, VERY WET CONSISTENCY
APPROX. 4 inches OF SOLIDS.

TRD

14. Video sample on tray: Time: 13:21

TRD

15. Take additional photos if required (Hasselblad camera):

a. Inside hot cell photography settings:

- (1) F-stop is set to 4.
- (2) Aperture is set between 11 and 8.
- (3) Wind to next available film.
- (4) Remove film plate.
- (5) Focus camera
- (6) Shoot picture

b. Record the following information:

- (1) Frame # 9-10
- (2) Time taken: 13:25

TRD

16. Complete Film Frame Record sheet for each picture taken.

TRD

17. Subsample according to instructions outlined in the TCP. Follow special instructions given by PC/chemist.

Time: 13:31

- a. Sample description: BX103 Core 86 Seg #1 D.L.
Riser #7

- (1) Jar/vial number: #6945
- (2) Jar/vial size : 250 mLs
 - (a) Final wt : 446.26 grams
 - (b) Initial wt : 224.55 grams
 - (c) Net wt : 221.71 grams

Time: 13:32

Time: 13:33

b. Sample description: BX 103 Core 86 Seg #1 Riser #7 (Solids)

(1) Jar/vial number: #6796
 (2) Jar/vial size : 125 mLs
 (a) Final wt: 163.22 grams
 (b) Initial wt: 129.31 grams
 (c) Net wt: 33.91 grams

Time: N/A

Time: _____

c. Sample description: N/A

(1) Jar/vial number: _____
 (2) Jar/vial size : _____ mLs
 (a) Final wt: _____ grams
 (b) Initial wt: _____ grams
 (c) Net wt: _____ grams

Time: _____

Time: _____

d. Sample description: _____

(1) Jar/vial number: _____
 (2) Jar/vial size : _____ mLs
 (a) Final wt: _____ grams
 (b) Initial wt: _____ grams
 (c) Net wt: _____ grams

Time: _____

Time: _____

e. Sample description: _____

(1) Jar/vial number: _____
 (2) Jar/vial size : _____ mLs
 (a) Final wt: _____ grams
 (b) Initial wt: _____ grams
 (c) Net wt: _____ grams

Time: N/A

E. Post Extrusion

TRD
TRD
6-02-95

1. Record total amount of solids and liquid collected in sample jars:

a.	Jar #	<u>6945</u>	Weight	<u>221.71</u>	grams
b.	Jar #	<u>6796</u>	Weight	<u>33.91</u>	grams
c.	Jar #	<u>N/A</u>	Weight	<u>N/A</u>	grams
d.	Jar #	<u>N/A</u>	Weight	<u>N/A</u>	grams

(1) Total Weight: 255.62 grams

- TRO 2. Update Jar notebook for jars/vials created during extrusion.
- TRO 3. Clean up hot cells, extrusion trays, auger, auger sleeve, auger liner and spatulas, etc. Use squeegee, sponge, and water to clean floor of hot cell.

F. Extrusion report

- TRO 1. Write up extrusion report in appropriate wordperfect file.
- a. WP Dir\File: WP DATA\WKPLANS\BX103 ^{EX-FARM} BX103 C86. INF
_{TRO 6-2-93}
- TRO 2. Send extrusion report (CC:Mail) to appropriate personnel.

G. Labcore

- RKZ 1. Complete data entry on labcore worklist.
- RKZ 2. Complete data entry into labcore computer system.
- RKZ 3. Chemist to review worklist for extrusion.
- RKZ 4. Return worklist for extrusion to lableader.
- RKZ 5. Update Paradox Database for jar/vials created during extrusion.

H. Laboratory Logbook:

- TRO 1. Update laboratory notebook.

I. Homogenization Setup

- RKZ 1. Worksheet for homogenizations and/or subsampling will be provided by the project coordinator.
- NA 2. Setup labcore batches for the tests to be performed. The tests may include the following:
- a. HOMGNZ01 (Homogenization test)
 - b. ARCHIVE (Archive)
 - c. SUBSMPL1 (Take a subsample)
 - d. V%SLD-01 (Volume % solids)
 - e. BLKDEN01 (Bulk Density)

- NA 3. Generate the worklist for the test to be performed.
a. Worklist number NA

J. Homogenization and Subsampling

- RK7 1. Perform appropriate test according to the worklist and record information on the worksheet provided. NOTE: A worksheet will be provide for each one of the tests listed in step J.2.
- RK7 2. Follow instructions provided with the homogenization and subsampling worksheet.
- RK7 3. Place picture in appropriate laboratory notebook.

NOTES:

Homogenization and subsampling completed on 6/5/95

Hot Cell Workplan - Push/Rotary Mode

Tank: 6X-103 Core: 86 Segment: 2 Riser: 7

Date: 05-31-95

TCP Number: WHC-SD-WM-T.P-339

Sample Number: 95-082

Cask Number: C1049

Logbook Number: WHC-N-1173

PC Name: Kevin Bell

Telephone: 373-1629

A. Sample Receipt and Storage

EC

1. Sample/Cask Receipt (procedure LO-090-101) from Door 10.

EC

2. Make 3 copies of the chain of custody. (Project Coordinator, Hot Cell Workplan, and Logbook).

EC

3. Record dose rate thru drill string: Dose rate = 500 mR/hr

EC

4. Place cask in short term storage.

EC

5. Update the SAMPLER/AUGER LOG-IN SHEET.

EC

6. Update the SAMPLER/AUGER LOAD-IN SHEET.

EC

7. Attach chain of custody to the hot cell workplan.

EC

8. Transfer hotcell workplan to Pre-Extrusion Preparation file.

B. Pre-Extrusion Preparation

EC

1. Prepare folder to consolidate papers for extrusion.

TR0

2. Prepare jars/vials needed for extrusion.

EC

3. Project coordinator (PC) shall input sample into labcore.

EC

4. PC shall generate labels for cask and liner.

EC

5. Attach labels to appropriate cask.

EC

6. Generate Batch for required segment that includes the following tests: Batch #: 95001370

- a. DLIQVOL1 (Drainable liquid volume)
- b. DLIQWT01 (Drainable liquid weight)
- c. EST.G/ML (Estimated Density)
- d. EXTRUD01 (Extrusion information)
- e. LLIQWT01 (Liner liquid weight)
- f. NOTEBOOK (Notebook number)
- g. SLDVOL01 (Estimated solid volume)
- h. SLDWT-01 (Solid weight)

EC

7. If required by project coordinators, generate a batch that includes the following tests: Batch #: 95001371

- a. ORGVOL01 (Organic Volume)
b. FSLDWT01 (Filterable solid weight)

EC

8. Generate a Worklist that includes the batches previously prepared.

- a. Worklist number 1463
b. Labcore number 5957000171

EC

9. Attach copy of worklist to the hot cell workplan.

EC

10. Transfer hot cell work plan to Cask Receipt and Preparation file.

C. Cask Receipt and Preparation.

SC

1. Receive cask from sample custodian (LO-090-101).

TRD

2. Perform section 5.6 of LO-161-172, Preparation of 11A-1A Hot Cell and Hood For Cask Disassembly.

TRD

3. Prepare cask according to section B of procedure LO-160-101.

TRD

4. Perform the following:
a. Sampler load-in (LO-161-172)
b. Liner load-out (if required)
c. Homogenized sample load-out (if required)
d. Jar load-in (if required).

TRD

5. Record the date the cask was loaded in on the SAMPLER/AUGER LOAD-IN SHEET.

TRD

6. Decon cask and prepare for return to tank farms.

TRD

7. Transfer hot cell work plan to Extrusion file.

D. Extrusion

RKZ

1. Prepare logbook for extrusion.
a. Update table of contents ✓
b. Chain of custody in place ✓

TRD

2. Pre-weigh all jars for the extrusion/subsampling operation.

TRD

3. Check video equipment and ensure battery is charged.

TRD

4. Prepare the start of the video tape by recording a label of the tank, segment, and date:

- a. Tape Number #8 Title BX-FARM

TRD

5. Contact PC and inform of extrusion.

- TRD 6. Contact Building Shift Manager for Waste Tank Volume information (Tank 101).
a. Shift manager contacted Glenn Wallv
b. Date/Time 05-31-95
- TRD 7. Record hot cell temperature and humidity
a. Temperature 78.1°F Humidity 30%
- TRD 8. Balance check with 20 and 500 gram weights:
a. 20 gm = 19.99 gms 500 gm = 499.98 gms
- TRD 9. Obtain initial weight of liner liquid jar before collecting the liner liquid. Complete the information below after collecting liner liquid.
- | | | | |
|----|--------------------------------|------------------|-------|
| a. | Is liner liquid present? | <u>YES</u> or NO | |
| b. | Jar/vial number: | <u>7179</u> | |
| c. | Jar/vial size: | <u>40</u> | mLs |
| d. | Final wt of liner liquid jar | <u>26.28</u> | grams |
| e. | Initial wt of liner liquid jar | <u>25.28</u> | grams |
| f. | Net wt of liner liquid jar | <u>1.00</u> | grams |
- g. Record physical characteristics:
clear - yellow, no organics
- (DISCARDED
vial 7179
41 mLs of sample)
- TRD 10. Verify the sampler serial # is the same as listed on the chain of custody.
Sampler serial #: 94-291
- TRD 11. Extrude sample according the appropriate section (push mode or rotary mode) in procedure LO-160-103.
a. Document the following information:
(1) Valve OPEN or CLOSED before cutting cables.
(a) Time: 14:21
(2) Valve OPEN or CLOSED after cutting cables.
(a) Time: 14:30
- TRD 12. Document the date and time the sampler valve opened:
a. Date: 05-31-95
b. Time: 14:45

TRO

13. Document the following information during the extrusion. Document time the video and Hasselblad photographs are obtained in steps 13 and 14.

- a. Description of Drainable Liquids:

BLACK Thick - slurry

- b. Description of Solids:

Removed Remaining
Sample IN VALVE HEAD
WITH SPATULA.

BLACK - WET - GRAINY TEXTURE, During subsampling observed that THE INTERIOR OF SAMPLE WAS A WHITE CHALKY MATERIAL, APPROX. 14 inches of Solids Extruded.

LOWER 9 inches WERE TAKEN AS LOWER HALF OF Segment.
UPPER 5 inches WERE TAKEN AS UPPER HALF OF Segment.
WAS NOT ABLE TO PUSH PISTON THROUGH THE VALVE HEAD.

TRO

14. Video sample on tray: Time: 14:51

TRO

15. Take additional photos if required (Hasselblad camera):

- a. Inside hot cell photography settings:

- (1) F-stop is set to 4.
- (2) Aperture is set between 11 and 8.
- (3) Wind to next available film.
- (4) Remove film plate.
- (5) Focus camera
- (6) Shoot picture

- b. Record the following information:

- (1) Frame # 11-12
- (2) Time taken: 14:55

TRO

16. Complete Film Frame Record sheet for each picture taken.

TRO

17. Subsample according to instructions outlined in the TCP. Follow special instructions given by PC/chemist.

Time: 15:00

- a. Sample description: Bx 103 Core 86 Seg #2 Riser #7
(L.H.)

- (1) Jar/vial number: # 7138
- (2) Jar/vial size : 250 mLs
 - (a) Final wt : 418.16 grams
 - (b) Initial wt : 222.62 grams
 - (c) Net wt : 195.54 grams

Time: 15:22

Time: 15:23 b. Sample description: BX103 Core 86 Seg #2 Riser 7 U.H.

(1) Jar/vial number: #6797
 (2) Jar/vial size : 125 mLs
 (a) Final wt: 216.33 grams
 (b) Initial wt: 129.65 grams
 (c) Net wt: 86.68 grams

Time: 15:29

Time: 15:30 c. Sample description: BX103 Core 86 Seg #2 Riser 7
DRAINAGE
liquid D.L.

(1) Jar/vial number: #6947
 (2) Jar/vial size : 250 mLs
 (a) Final wt: 245.71 grams
 (b) Initial wt: 224.32 grams
 (c) Net wt: 21.39 grams

Time: 15:35

Time: N/A d. Sample description: N/A

(1) Jar/vial number: _____
 (2) Jar/vial size : _____ mLs
 (a) Final wt: _____ grams
 (b) Initial wt: _____ grams
 (c) Net wt: _____ grams

Time: _____

Time: _____ e. Sample description: _____

(1) Jar/vial number: _____
 (2) Jar/vial size : _____ mLs
 (a) Final wt: _____ grams
 (b) Initial wt: _____ grams
 (c) Net wt: N/A grams

Time: N/A

E. Post Extrusion

TRO 1. Record total amount of solids and liquid collected in sample jars:

a.	Jar #	<u>7138</u>	Weight	<u>195.54</u> grams
b.	Jar #	<u>6797</u>	Weight	<u>86.68</u> grams
c.	Jar #	<u>6947</u>	Weight	<u>21.39</u> grams
d.	Jar #	<u>N/A</u>	Weight	<u>N/A</u> grams

(1) Total Weight: 303.61 grams

TRO

2. Update Jar notebook for jars/vials created during extrusion.

TRO

3. Clean up hot cells, extrusion trays, auger, auger sleeve, auger liner and spatulas, etc. Use squeegee, sponge, and water to clean floor of hot cell.

F. Extrusion report

TRO

1. Write up extrusion report in appropriate wordperfect file.

a. WP Dir\File: Wpdata\WkPlans\BxFarm\Bx103C86.INF

TRO

2. Send extrusion report (CC:Mail) to appropriate personnel.

G. Labcore

RKF

1. Complete data entry on labcore worklist.

RKF

2. Complete data entry into labcore computer system.

RKF

3. Chemist to review worklist for extrusion.

RKF

4. Return worklist for extrusion to lableader.

RKF

5. Update Paradox Database for jar/vials created during extrusion.

H. Laboratory Logbook:

TRO

1. Update laboratory notebook.

I. Homogenization Setup

ABK

1. Worksheet for homogenizations and/or subsampling will be provided by the project coordinator.

N/A

2. Setup labcore batches for the tests to be performed. The tests may include the following:

- a. HOMGNZ01 (Homogenization test)
- b. ARCHIVE (Archive)
- c. SUBSMPL1 (Take a subsample)
- d. V%SLD-01 (Volume % solids)
- e. BLKDEN01 (Bulk Density)

N/A

3. Generate the worklist for the test to be performed.

a. Worklist number N/A

J. Homogenization and Subsampling

ABC

1. Perform appropriate test according to the worklist and record information on the worksheet provided. NOTE: A worksheet will be provide for each one of the tests listed in step J.2.

ABC

2. Follow instructions provided with the homogenization and subsampling worksheet.

ABC

3. Place picture in appropriate laboratory notebook.

NOTES:

Hot Cell Workplan - Push/Rotary ModeTank: BX103 Core: 87 Segment: 1 Riser: 2Date: 06-05-95
TCP Number: WHC-SD-WM-IP-339
Sample Number: 95-043
Cask Number: C 1034
Logbook Number: WHC-N-1173
PC Name: Kevin BellTelephone: 373-1629A. Sample Receipt and StorageEC

1. Sample/Cask Receipt (procedure LO-090-101) from Door 10.

EC

2. Make 3 copies of the chain of custody. (Project Coordinator, Hot Cell Workplan, and Logbook).

EC3. Record dose rate thru drill string: Dose rate = 440 mR/hrEC

4. Place cask in short term storage.

EC

5. Update the SAMPLER/AUGER LOG-IN SHEET.

EC

6. Update the SAMPLER/AUGER LOAD-IN SHEET.

EC

7. Attach chain of custody to the hot cell workplan.

EC

8. Transfer hotcell workplan to Pre-Extrusion Preparation file.

B. Pre-Extrusion PreparationEC

1. Prepare folder to consolidate papers for extrusion.

TRD

2. Prepare jars/vials needed for extrusion.

EC

3. Project coordinator (PC) shall input sample into labcore.

EC

4. PC shall generate labels for cask and liner.

EC

5. Attach labels to appropriate cask.

EC6. Generate Batch for required segment that includes the following tests: Batch #: 95001390

- a. DLIQVOL1 (Drainable liquid volume)
- b. DLIQWT01 (Drainable liquid weight)
- c. EST.G/ML (Estimated Density)
- d. EXTRUD01 (Extrusion information)
- e. LLIQWT01 (Liner liquid weight)
- f. NOTEBOOK (Notebook number)
- g. SLDVOL01 (Estimated solid volume)
- h. SLDWT-01 (Solid weight)

EC

7. If required by project coordinators, generate a batch that includes the following tests: Batch #: 95001393

- a. ORGVOL01 (Organic Volume)
b. FSLDWT01 (Filterable solid weight)

EC

8. Generate a Worklist that includes the batches previously prepared.

- a. Worklist number 1479
b. Labcore number 5957001004

EC

9. Attach copy of worklist to the hot cell workplan.

EC

10. Transfer hot cell work plan to Cask Receipt and Preparation file.

C. Cask Receipt and Preparation.

EC

1. Receive cask from sample custodian (LO-090-101).

TRW

2. Perform section 5.6 of LO-161-172, Preparation of 11A-1A Hot Cell and Hood For Cask Disassembly.

TRW

3. Prepare cask according to section B of procedure LO-160-101.

TRW

4. Perform the following:
a. Sampler load-in (LO-161-172)
b. Liner load-out (if required)
c. Homogenized sample load-out (if required)
d. Jar load-in (if required).

TRW

5. Record the date the cask was loaded in on the SAMPLER/AUGER LOAD-IN SHEET.

TRW

6. Decon cask and prepare for return to tank farms.

TRW

7. Transfer hot cell work plan to Extrusion file.

D. Extrusion

TRW

1. Prepare logbook for extrusion.
a. Update table of contents ✓
b. Chain of custody in place ✓

TRW

2. Pre-weigh all jars for the extrusion/subsampling operation.

TRW

3. Check video equipment and ensure battery is charged.

TRW

4. Prepare the start of the video tape by recording a label of the tank, segment, and date:

- a. Tape Number #8 Title BX-FARM

TRW

5. Contact PC and inform of extrusion.

- PRO 6. Contact Building Shift Manager for Waste Tank Volume information (Tank 101).
a. Shift manager contacted Glen Wally
b. Date/Time 8:30 06-05-95
- TRD 7. Record hot cell temperature and humidity
a. Temperature 80.4°F Humidity 20%
- TRD 8. Balance check with 20 and 500 gram weights:
a. 20 gm = 19.99 gms 500 gm = 499.98 gms
- TRD 9. Obtain initial weight of liner liquid jar before collecting the liner liquid. Complete the information below after collecting liner liquid.
a. Is liner liquid present? YES or NO
b. Jar/vial number: 7186
c. Jar/vial size: 40 mLs
d. Final wt of liner liquid jar n/A grams
e. Initial wt of liner liquid jar 25.51 grams
f. Net wt of liner liquid jar n/A grams
g. Record physical characteristics:
- TRD 10. Verify the sampler serial # is the same as listed on the chain of custody.
Sampler serial #: 94-289
- ABB 11. Extrude sample according the appropriate section (push mode or rotary mode) in procedure LO-160-103.
a. Document the following information:
(1) Valve OPEN or CLOSED before cutting cables.
(a) Time: 1318
(2) Valve OPEN or CLOSED after cutting cables.
(a) Time: 1320
- ABY 12. Document the date and time the sampler valve opened:
a. Date: 6/5/95
b. Time: 1822

- 7/B 1324 13. Document the following information during the extrusion. Document time the video and Hasselblad photographs are obtained in steps 13 and 14.

a. Description of Drainable Liquids:

Cloudy, black liquid collected throughout extrusion

b. Description of Solids:

collected 1 to 2 inches of shiny, black, moist sludge with a ^{20 11/15/95} grainy texture near beginning of extrusion.

Collected an additional 4-5 inches of same material near the end of the extrusion. First portion collected as lower half sludge. Second portion collected as upper half sludge.

2/B 14. Video sample on tray: Time: 1325

2/B 15. Take additional photos if required (Hasselblad camera):

a. Inside hot cell photography settings:

- (1) F-stop is set to 4.
- (2) Aperature is set between 11 and 8.
- (3) Wind to next available film.
- (4) Remove film plate.
- (5) Focus camera
- (6) Shoot picture

b. Record the following information:

- (1) Frame # 203
- (2) Time taken: 1327

AB3 16. Complete Film Frame Record sheet for each picture taken.

AB3 17. Subsample according to instructions outlined in the TCP. Follow special instructions given by PC/chemist.

Time: 13 a. Sample description: Drainable Liquid

- (1) Jar/vial number: 7140
- (2) Jar/vial size: 400 + 90 mLs *collected*
- (a) Final wt: 437.35 grams *190 mLs*
- (b) Initial wt: 222.84 grams *Drainable Liquid*
- (c) Net wt: 214.51 grams

Time: 1330

Time: 1345

b. Sample description: Lower half solids

(1) Jar/vial number: 6799
 (2) Jar/vial size : 125 mLs
 (a) Final wt: 154.86 grams
 (b) Initial wt: 130.32 grams
 (c) Net wt: 24.54 grams

Time: 1350

Time: 1350

c. Sample description: Upper half solids

(1) Jar/vial number: 7070
 (2) Jar/vial size : 125 mLs
 (a) Final wt: 199.74 grams
 (b) Initial wt: 129.64 grams
 (c) Net wt: 70.10 grams

Time: 1355

Time:

d. Sample description:

(1) Jar/vial number:
 (2) Jar/vial size : mLs
 (a) Final wt: grams
 (b) Initial wt: grams
 (c) Net wt: grams

Time:

Time:

e. Sample description:

(1) Jar/vial number:
 (2) Jar/vial size : mLs
 (a) Final wt: grams
 (b) Initial wt: grams
 (c) Net wt: grams

Time:

E. Post Extrusion

A13B

1. Record total amount of solids and liquid collected in sample jars:

a. Jar # 7140 Weight 214.51 grams
 b. Jar # 6799 Weight 24.54 grams
 c. Jar # 7070 Weight 70.10 grams
 d. Jar # Weight grams

(1) Total Weight: 309.15 grams

2. Update Jar notebook for jars/vials created during extrusion.

3. Clean up hot cells, extrusion trays, auger, auger sleeve, auger liner and spatulas, etc. Use squeegee, sponge, and water to clean floor of hot cell.

F. Extrusion report

1. Write up extrusion report in appropriate wordperfect file.

a. WP Dir\File: C:\wpdir\wpwin\BXPARN\BX103\BX103C87.INI

2. Send extrusion report (CC:Mail) to appropriate personnel.

G. Labcore

1. Complete data entry on labcore worklist.

2. Complete data entry into labcore computer system.

3. Chemist to review worklist for extrusion.

4. Return worklist for extrusion to tableader.

5. Update Paradox Database for jar/vials created during extrusion.

H. Laboratory Logbook:

1. Update laboratory notebook.

I. Homogenization Setup

1. Worksheet for homogenizations and/or subsampling will be provided by the project coordinator.

2. Setup labcore batches for the tests to be performed. The tests may include the following:

a. HOMGNZ01 (Homogenization test)

b. ARCHIVE (Archive)

- c. SUBSMPL1 (Take a subsample)

d. V%SLD-01 (Volume % solids)

e. BLKDEN01 (Bulk Density)

1. NA 3. Generate the worklist for the test to be performed.
a. Worklist number NA

J. Homogenization and Subsampling

- abc 1. Perform appropriate test according to the worklist and record information on the worksheet provided. NOTE: A worksheet will be provide for each one of the tests listed in step J.2.
- qds 2. Follow instructions provided with the homogenization and subsampling worksheet.
- qs 3. Place picture in appropriate laboratory notebook.

NOTES:

Hot Cell Workplan - Push/Rotary ModeTank: 05X-103 Core: 87 Segment: 2 Riser: 2Date: 06-05-95
TCP Number: WHC-SD-WM-TP-339
Sample Number: 95-084
Cask Number: C1045
Logbook Number: WHC-N-1173
PC Name: Kevin BellTelephone: 373-1629A. Sample Receipt and Storage

- EC 1. Sample/Cask Receipt (procedure LO-090-101) from Door 10.
- EC 2. Make 3 copies of the chain of custody. (Project Coordinator, Hot Cell Workplan, and Logbook).
- EC 3. Record dose rate thru drill string: Dose rate = 320 mR/hr
- EC 4. Place cask in short term storage.
- EC 5. Update the SAMPLER/AUGER LOG-IN SHEET.
- EC 6. Update the SAMPLER/AUGER LOAD-IN SHEET.
- EC 7. Attach chain of custody to the hot cell workplan.
- EC 8. Transfer hotcell workplan to Pre-Extrusion Preparation file.

B. Pre-Extrusion Preparation

- EC 1. Prepare folder to consolidate papers for extrusion.
- RHF 2. Prepare jars/vials needed for extrusion.
- EC 3. Project coordinator (PC) shall input sample into labcore.
- EC 4. PC shall generate labels for cask and liner.
- EC 5. Attach labels to appropriate cask.
- EC 6. Generate Batch for required segment that includes the following tests: Batch #: 95001391
- DLIQVOL1 (Drainable liquid volume)
 - DLIQWT01 (Drainable liquid weight)
 - EST.G/ML (Estimated Density)
 - EXTRUD01 (Extrusion information)
 - LLIQWT01 (Liner liquid weight)
 - NOTEBOOK (Notebook number)
 - SLDVOL01 (Estimated solid volume)
 - SLDWT-01 (Solid weight)

EC

7. If required by project coordinators, generate a batch that includes the following tests: Batch #: 95001394

- a. ORGVOL01 (Organic Volume)
b. FSLDWT01 (Filterable solid weight)

EC

8. Generate a Worklist that includes the batches previously prepared.

- a. Worklist number 1480
b. Labcore number 545T00105 ^{EC 245}

EC

9. Attach copy of worklist to the hot cell workplan.

EC

10. Transfer hot cell work plan to Cask Receipt and Preparation file.

C. Cask Receipt and Preparation.

EC

1. Receive cask from sample custodian (LO-090-101).

ABB

2. Perform section 5.6 of LO-161-172, Preparation of 11A-1A Hot Cell and Hood For Cask Disassembly.

ABB

3. Prepare cask according to section B of procedure LO-160-101.

ABB

4. Perform the following:
a. Sampler load-in (LO-161-172)
b. Liner load-out (if required)
c. Homogenized sample load-out (if required)
d. Jar load-in (if required).

ABB

5. Record the date the cask was loaded in on the SAMPLER/AUGER LOAD-IN SHEET.

ABB

6. Decon cask and prepare for return to tank farms.

ABB

7. Transfer hot cell work plan to Extrusion file.

D. Extrusion

ABB

1. Prepare logbook for extrusion.
a. Update table of contents ✓
b. Chain of custody in place ✓

ABB

2. Pre-weigh all jars for the extrusion/subsampling operation.

ABB

3. Check video equipment and ensure battery is charged.

ABB

4. Prepare the start of the video tape by recording a label of the tank, segment, and date:

- a. Tape Number 8 Title BX FARM

ABB

5. Contact PC and inform of extrusion.

- ABB 6. Contact Building Shift Manager for Waste Tank Volume information (Tank 101).
a. Shift manager contacted G/ken Wally
b. Date/Time 2/5/55 / 0830
- ADD 7. Record hot cell temperature and humidity
a. Temperature 80.2 °F Humidity 25 %
- ADD 8. Balance check with 20 and 500 gram weights:
a. 20 gm = 19.999gms 500 gm = 499.980gms
- ADD 9. Obtain initial weight of liner liquid jar before collecting the liner liquid. Complete the information below after collecting liner liquid.

- a. Is liner liquid present? YES or NO
b. Jar/vial number: 7186
c. Jar/vial size: 412 mLs
d. Final wt of liner liquid jar 33.54 grams
e. Initial wt of liner liquid jar 25.51 grams
f. Net wt of liner liquid jar 8.43 grams

- g. Record physical characteristics:

*Approximately 5 mL of Liner Liq recovered.
Liquor is a dull yellow color and is turbid with suspended solids.*

- ADD 10. Verify the sampler serial # is the same as listed on the chain of custody.

Sampler serial #: 94-287

- ADD 11. Extrude sample according the appropriate section (push mode or rotary mode) in procedure LO-160-103.

- a. Document the following information:

- (1) Valve OPEN or CLOSED before cutting cables.

(a) Time: 14:55

- (2) Valve OPEN or CLOSED after cutting cables.

(a) Time: 14:30

- ADD 12. Document the date and time the sampler valve opened:

- a. Date: 06-05-95
b. Time: 14:31
7:20 06-05-95

b. Time: 14:42

XB

13. Document the following information during the extrusion. Document time the video and Hasselblad photographs are obtained in steps ¹⁴13 and ¹⁵14.

- a. Description of Drainable Liquids:

Collected very dark brown, cloudy liquids 2-3 inches into the extrusion. Sample tray was tilted to collect liquids

- b. Description of Solids:

Last to extrude was 8-9 inches of sludge that retained its shape in the extrusion tray. The solids were very dark brown and swirled with yellow material. Most of the yellow appeared in the middle 5 inches of sample. All solids were collected at the upper half of the segment. Yellow material is somewhat crumbly in some areas and bright yellow and with a smooth consistency in other areas.

XB

14. Video sample on tray: Time: 1450

XB

15. Take additional photos if required (Hasselblad camera):

- a. Inside hot cell photography settings:

- (1) F-stop is set to 4.
- (2) Aperture is set between 11 and 8.
- (3) Wind to next available film.
- (4) Remove film plate.
- (5) Focus camera
- (6) Shoot picture

- b. Record the following information:

- (1) Frame # 4 + 5
- (2) Time taken: 1455

JP

16. Complete Film Frame Record sheet for each picture taken.

XB

17. Subsample according to instructions outlined in the TCP. Follow special instructions given by PC/chemist.

Time: 1503

- a. Sample description: drainable lig.

- (1) Jar/vial number: 7169
- (2) Jar/vial size : 40 mLs
 - (a) Final wt : 43.560 grams
 - (b) Initial wt : 25.308 grams
 - (c) Net wt : 18.252 grams

Time: 1506

Time: 1517

b. Sample description: upper half sludge

(1) Jar/vial number: 7141
 (2) Jar/vial size : 250 mLs
 (a) Final wt: 466.827 grams
 (b) Initial wt: 222.119 grams
 (c) Net wt: 244.714 grams

Time: 1530

Time: _____

c. Sample description: _____

(1) Jar/vial number: _____
 (2) Jar/vial size : _____ mLs
 (a) Final wt: _____ grams
 (b) Initial wt: _____ grams
 (c) Net wt: _____ grams

Time: _____

Time: _____

d. Sample description: _____

(1) Jar/vial number: _____
 (2) Jar/vial size : _____ mLs
 (a) Final wt: _____ grams
 (b) Initial wt: _____ grams
 (c) Net wt: _____ grams

Time: _____

Time: _____

e. Sample description: _____

(1) Jar/vial number: _____
 (2) Jar/vial size : _____ mLs
 (a) Final wt: _____ grams
 (b) Initial wt: _____ grams
 (c) Net wt: _____ grams

Time: _____

E. Post Extrusion

AKB

1. Record total amount of solids and liquid collected in sample jars:

a. Jar # 7169 Weight 18.25 grams
 b. Jar # 7141 Weight 244.71 grams
 c. Jar # 7186 Weight _____ grams
 d. Jar # 7186 Weight _____ grams

(1) Total Weight: 262.96 grams

ABB

2. Update Jar notebook for jars/vials created during extrusion.

ABB

3. Clean up hot cells, extrusion trays, auger, auger sleeve, auger liner and spatulas, etc. Use squeegee, sponge, and water to clean floor of hot cell.

F. Extrusion report

ABR

1. Write up extrusion report in appropriate wordperfect file.

a. WP Dir\File: C:\WPData\WPPlans\By Form\BX103\BX103C87.doc

TR0

2. Send extrusion report (CC:Mail) to appropriate personnel.

G. Labcore

RK7

1. Complete data entry on labcore worklist.

RK7

2. Complete data entry into labcore computer system.

RK7

3. Chemist to review worklist for extrusion.

RK7

4. Return worklist for extrusion to tableader.

RK7

5. Update Paradox Database for jar/vials created during extrusion.

H. Laboratory Logbook:

TR0

1. Update laboratory notebook.

I. Homogenization Setup

RK7

1. Worksheet for homogenizations and/or subsampling will be provided by the project coordinator.

N/A

2. Setup labcore batches for the tests to be performed. The tests may include the following:

- a. HOMGNZ01 (Homogenization test)
- b. ARCHIVE (Archive)
- c. SUBSMPL1 (Take a subsample)
- d. V%SLD-01 (Volume % solids)
- e. BLKDEN01 (Bulk Density)

NA

3. Generate the worklist for the test to be performed.
 - a. Worklist number NA

J.
RF

Homogenization and Subsampling

RF

1. Perform appropriate test according to the worklist and record information on the worksheet provided. NOTE: A worksheet will be provide for each one of the tests listed in step J.2.
2. Follow instructions provided with the homogenization and subsampling worksheet.
3. Place picture in appropriate laboratory notebook.

RB7

NOTES:

Hot Cell Workplan - Push/Rotary ModeTank: BX-103 Core: 87 Segment: Field Blank Riser: 2Date: 06-05-95TCP Number: WHC-SD-WM-TP-339Sample Number: Field BlankCask Number: C-1055Logbook Number: WHC-N-1173PC Name: Kevin BellTelephone: 373-1629A. Sample Receipt and StorageEC

1. Sample/Cask Receipt (procedure LO-090-101) from Door 10.

EC

2. Make 3 copies of the chain of custody. (Project Coordinator, Hot Cell Workplan, and Logbook).

EC3. Record dose rate thru drill string: Dose rate = 0EC

4. Place cask in short term storage.

EC

5. Update the SAMPLER/AUGER LOG-IN SHEET.

EC

6. Update the SAMPLER/AUGER LOAD-IN SHEET.

EC

7. Attach chain of custody to the hot cell workplan.

EC

8. Transfer hotcell workplan to Pre-Extrusion Preparation file.

B. Pre-Extrusion PreparationEC

1. Prepare folder to consolidate papers for extrusion.

DRD

2. Prepare jars/vials needed for extrusion.

EC

3. Project coordinator (PC) shall input sample into labcore.

EC

4. PC shall generate labels for cask and liner.

EC

5. Attach labels to appropriate cask.

EC6. Generate Batch for required segment that includes the following tests: Batch #: 95001389

- DLIQVOL1 (Drainable liquid volume)
- DLIQWT01 (Drainable liquid weight)
- EST.G/ML (Estimated Density)
- EXTRUD01 (Extrusion information)
- LLIQWT01 (Liner liquid weight)
- NOTEBOOK (Notebook number)
- SLDVOL01 (Estimated solid volume)
- SLDWT-01 (Solid weight)

EC

7. If required by project coordinators, generate a batch that includes the following tests: Batch #: 95001392

- a. ORGVOL01 (Organic Volume)
b. FSLDWT01 (Filterable solid weight)

EC

8. Generate a Worklist that includes the batches previously prepared.

- a. Worklist number 1478
b. Labcore number 595T00/006

EC

9. Attach copy of worklist to the hot cell workplan.

EC

10. Transfer hot cell work plan to Cask Receipt and Preparation file.

C. Cask Receipt and Preparation.

EC

1. Receive cask from sample custodian (LO-090-101).

ABB

2. Perform section 5.6 of LO-161-172, Preparation of 11A-1A Hot Cell and Hood For Cask Disassembly.

ABB

3. Prepare cask according to section B of procedure LO-160-101.

ABB

4. Perform the following:
a. Sampler load-in (LO-161-172)
b. Liner load-out (if required)
c. Homogenized sample load-out (if required)
d. Jar load-in (if required).

ABB

5. Record the date the cask was loaded in on the SAMPLER/AUGER LOAD-IN SHEET.

ABB

6. Decon cask and prepare for return to tank farms.

ABB

7. Transfer hot cell work plan to Extrusion file.

D. Extrusion

MB

1. Prepare logbook for extrusion.
a. Update table of contents
b. Chain of custody in place ✓

TRC

2. Pre-weigh all jars for the extrusion/subsampling operation.

TRC

3. Check video equipment and ensure battery is charged.

ABB

4. Prepare the start of the video tape by recording a label of the tank, segment, and date:

- a. Tape Number 8 Title BX Farm

TRC

5. Contact PC and inform of extrusion.

- AB 6. Contact Building Shift Manager for Waste Tank Volume information (Tank 101).
a. Shift manager contacted G/James Walling
b. Date/Time 6/5/95 @ 0930
- TR 7. Record hot cell temperature and humidity
a. Temperature 80.1°F Humidity 25%
- TR 8. Balance check with 20 and 500 gram weights:
a. 20 gm = 20.00 gms 500 gm = 499.98 gms
- TR 9. Obtain initial weight of liner liquid jar before collecting the liner liquid. Complete the information below after collecting liner liquid.
a. Is liner liquid present? YES or NO
b. Jar/vial number: 6-35-40 7186
c. Jar/vial size: 40 mLs
d. Final wt of liner liquid jar n/A grams
e. Initial wt of liner liquid jar 25.51 grams
f. Net wt of liner liquid jar n/A grams
g. Record physical characteristics:
- TR 10. Verify the sampler serial # is the same as listed on the chain of custody.
Sampler serial #: 94-290
- TR 11. Extrude sample according the appropriate section (push mode or rotary mode) in procedure LO-160-103.
a. Document the following information:
(1) Valve OPEN or CLOSED before cutting cables.
(a) Time: 10:47
(2) Valve OPEN or CLOSED after cutting cables.
(a) Time: 10:53
- TR 12. Document the date and time the sampler valve opened:
a. Date: 06-05-95
b. Time: 11:05

TR0 13. Document the following information during the extrusion. Document time the video and Hasselblad photographs are obtained in steps 13 and 14.

a. Description of Drainable Liquids:

clear-colorless-liquid,
no solids

b. Description of Solids:

N/A

TR0 14. Video sample on tray: Time: 11:15

TR0 15. Take additional photos if required (Hasselblad camera):

a. Inside hot cell photography settings:

- (1) F-stop is set to 4.
- (2) Aperture is set between 11 and 8.
- (3) Wind to next available film.
- (4) Remove film plate.
- (5) Focus camera
- (6) Shoot picture

b. Record the following information:

- (1) Frame # #1
- (2) Time taken: 11:19

TR0 16. Complete Film Frame Record sheet for each picture taken.

TR0 17. Subsample according to instructions outlined in the TCP. Follow special instructions given by PC/chemist.

Time: 11:20 a. Sample description: BX-103 Core 87 Blank Riser #2

- (1) Jar/vial number: 7139
- (2) Jar/vial size : 250 mLs
 - (a) Final wt : 460.84 grams
 - (b) Initial wt : 222.15 grams
 - (c) Net wt : 238.69 grams

Time: 11:21

Time: 11:25 b. Sample description: Bx-103 Core 87 Blank Riser #2

(1) Jar/vial number: 6798
 (2) Jar/vial size : 125 mLs
 (a) Final wt: 169.79 grams
 (b) Initial wt: 130.45 grams
 (c) Net wt: 39.34 grams

Time: 11:30

Time: N/A

c. Sample description: N/A

(1) Jar/vial number: _____
 (2) Jar/vial size : _____ mLs
 (a) Final wt: _____ grams
 (b) Initial wt: _____ grams
 (c) Net wt: _____ grams

Time: _____

Time: _____

d. Sample description: _____

(1) Jar/vial number: _____
 (2) Jar/vial size : _____ mLs
 (a) Final wt: _____ grams
 (b) Initial wt: _____ grams
 (c) Net wt: _____ grams

Time: _____

Time: _____

e. Sample description: _____

(1) Jar/vial number: _____
 (2) Jar/vial size : _____ mLs
 (a) Final wt: _____ grams
 (b) Initial wt: _____ grams
 (c) Net wt: N/A grams

Time: N/A

E. Post Extrusion

TRD

1. Record total amount of solids and liquid collected in sample jars:

a.	Jar #	<u>7139</u>	Weight	<u>238.69</u>	grams
b.	Jar #	<u>6798</u>	Weight	<u>39.34</u>	grams
c.	Jar #	<u>/</u>	Weight	<u>/</u>	grams
d.	Jar #	<u>/</u>	Weight	<u>/</u>	grams

(1) Total Weight: 278.03 grams

- TRD 2. Update Jar notebook for jars/vials created during extrusion.
- TRD 3. Clean up hot cells, extrusion trays, auger, auger sleeve, auger liner and spatulas, etc. Use squeegee, sponge, and water to clean floor of hot cell.

F. Extrusion report

- ABB 1. Write up extrusion report in appropriate wordperfect file.
 a. WP Dir\File: C:\wpdata\wp\p2\ ~~BB~~ / BB 6/6/95 \ B\FARM\BX103\BX103C87.INI
- TRD 2. Send extrusion report (CC:Mail) to appropriate personnel.

G. Labcore

- RKT 1. Complete data entry on labcore worklist.
- RKT 2. Complete data entry into labcore computer system.
- RKT 3. Chemist to review worklist for extrusion.
- RKT 4. Return worklist for extrusion to lableader.
- RKT 5. Update Paradox Database for jar/vials created during extrusion.

H. Laboratory Logbook:

- TRD 1. Update laboratory notebook.

I. Homogenization Setup

- RKT 1. Worksheet for homogenizations and/or subsampling will be provided by the project coordinator.
- NA 2. Setup labcore batches for the tests to be performed. The tests may include the following:
- a. HOMGNZ01 (Homogenization test)
 - b. ARCHIVE (Archive)
 - c. SUBSMPL1 (Take a subsample)
 - d. V%SLD-01 (Volume % solids)
 - e. BLKDEN01 (Bulk Density)

NA

3. Generate the worklist for the test to be performed.
 - a. Worklist number _____

J. Homogenization and Subsampling

RH

1. Perform appropriate test according to the worklist and record information on the worksheet provided. NOTE: A worksheet will be provide for each one of the tests listed in step J.2.

RT

2. Follow instructions provided with the homogenization and subsampling worksheet.

LA

3. Place picture in appropriate laboratory notebook.

NOTES:

WHC-SD-WM-DP-135, REV. 1

ATTACHMENT 3

EXTRUSION REPORTS

BX-103 Core 86 Segment #1 (Riser #7)

Date: May 31, 1995
 Sample number: 95-081
 Cask serial #: C1035
 Logbook #: WHC-N-1173
 Labcore #: S95T000970

Notes:

- * Hot Cell Temp 78.3 degrees F. Humidity 31%.
- * Check weights: 20 g = 20.00 g, 500 g = 499.98 g
- * Dose rate through the drill string was 350 mR/hr.
- * Expected sample length is 4 inches.
- * Collected < 5 mL of liner liquid. Did not retain.
- * Sampler valve closed before and after cutting cables.
- * Extruded sample and performed photography.

Sample information:

- * Extruded about 4 inches of solid sample (33.91 grams). Drainable liquid collected was approx. 210 mL. (dark black in color). Solids were black, runny, and grainy with a very wet consistency. Subsampled solids into one jar.

Subsample information:

- * Drainable Liquid:
BX-103 Core 86 Segment #1 Drainable Liquid:
 -Jar # 6945 (250 mL)
 -221.71 grams collected
- * Subsampled Solids: Sludge material
BX-103 Core 86 Segment #1 Solids:
 -Jar # 6796 (125 mL)
 -33.91 grams collected

Notes:

- * A total of 33.91 grams of solid sample was collected. The dose rate through the drill string was 350 mR/hr. No problems with sampler valve. Valve was easy to open.

BX-103 Core 86 Segment #2 (Riser #7)

Date: May 31, 1995
 Sample number: 95-082
 Cask serial #: C1049
 Logbook #: WHC-N-1173
 Labcore #: S95T000971

Notes:

- * Hot Cell Temp 78.1 degrees F. Humidity 30%.
- * Check weights: 20 g = 19.99 g; 500 g = 499.98 g
- * Dose rate through the drill string was 500 mR/hr.
- * Expected sample length is 19 inches.
- * Collected < 5 mL of liner liquid. Did not retain.
- * Sampler valve closed before and after cutting cables.
- * Extruded sample and performed photography.

Sample information:

- * Extruded about 14 inches of solid sample (86.68 grams of upper-half solids and 195.54 grams of lower-half solids: total solids = 282.22 grams). Drainable liquid collected approx. 20 mL (21.39 grams). Solids were black-wet-grainy in texture, during subsampling observed that the interior of sample contained a white, chalky material. Lower 9 inches were taken as lower half of segment. Upper 5 inches were taken as upper half of segment. Was not able to push piston through the valve head assembly. Removed remaining sample in valve head with spatula.

Subsample information:

- * Drainable Liquid:
BX-103 Core 86 Segment #2 Drainable Liquid:
 -Jar # 6947 (250 mL)
 -21.39 grams collected
- * Subsampled Solids: Lower Half
BX-103 Core 86 Segment #2 Lower Half Solids:
 -Jar # 7138 (250 mL)
 -195.54 grams collected
- * Subsampled Solids: Upper Half
BX-103 Core 86 Segment #2 Upper Half Solids:
 -Jar # 6797 (125 mL)
 -86.68 grams collected

Notes:

- * A total of 282.82 grams of solid sample was collected. The dose rate through the drill string was 500 mR/hr. Problems with sampler valve: Was not able to push piston through the valve head approx. 2 inches short of coming out of sampler.

BX-103 Core 87 Segment #1 (Riser #2)

Date: June 05, 1995
 Sample number: 95-083
 Cask serial #: C1034
 Logbook #: WHC-N-1173
 Labcore #: S95T001004

Notes:

- * Hot Cell Temp 80.4 degrees F. Humidity 20%.
- * Check weights: 20 g = 19.99 g; 500 g = 499.98 g
- * Dose rate through the drill string was 440 mR/hr.
- * Expected sample length is 19 inches.
- * No liner liquid collected or observed.
- * Sampler valve closed before and after cutting cables.
- * Extruded sample and performed photography.

Sample information:

- * Extruded about 7 inches of solid sample (70.10 grams of upper-half solids and 24.54 grams of lower-half solids: total solids collected was 94.64 grams). Drainable liquid collected was approximately 190 mL (214.51 grams), which was turbid and black in color. Solids were shiny black-wet-grainy in texture. During the first part of the extrusion process, observed 2 inches of solids which was collected as the lower half segment. Near the end of the extrusion, collected an additional 5 inches which was collected as the upper half segment.

Subsample information:

- * Drainable Liquid:
 BX-103 Core 87 Segment #1 Drainable Liquid:
 -Jar # 7140 (250 mL)
 -214.51 grams collected
- * Subsampled Solids: Lower Half
 BX-103 Core 87 Segment #1 Lower Half Solids:
 -Jar # 6799 (125 mL)
 -24.54 grams collected
- * Subsampled Solids: Upper Half
 BX-103 Core 87 Segment #1 Upper Half Solids:
 -Jar # 7070 (125 mL)
 -70.10 grams collected

Notes:

- * A total of 309.15 grams of solid and liquid sample was collected. The dose rate through the drill string was 440 mR/hr. No problems with sampler valve. Valve was easy to open.

BX-103 Core 87 Segment #2 (Riser #2)

Date: June 05, 1995
 Sample number: 95-084
 Cask serial #: C-1045
 Logbook #: WHC-N-1173
 Labcore #: S95T001005

Notes:

- * Hot Cell Temp 80.2 degrees F. Humidity 25%.
- * Check weights: 20 g = 19.99 g; 500 g = 499.98 g
- * Dose rate through the drill string was 320 mR/hr.
- * Expected sample length is 16.75 inches.
- * Collected < 5 mL of liner liquid. Did not retain.
- * Sampler valve closed before and after cutting cables.
- * Extruded sample and performed photography.

Sample information:

- * Extruded about 9 inches of solid sample near the end of the extrusion process, which was subsampled as the upper half (244.71 grams of solids collected). Drainable liquid collected approx. 15 mL (18.25 grams), which was turbid and dark brown in color. Solids were very dark brown and swirled with yellow material. Most of the yellow appeared in the middle 5 inches of sample. Yellow material is somewhat crumbly in some areas with a smooth consistency in other areas.

Subsample information:

- * Drainable Liquid:
 BX-103 Core 87 Segment #2 Drainable Liquid:
 -Jar # 7169 (40 mL)
 -18.25 grams collected
- * Subsampled Solids: Upper Half
 BX-103 Core 87 Segment #2 Upper Half Solids:
 -Jar # 7141 (250 mL)
 -244.71 grams collected

Notes:

- * A total of 262.96 grams of solid and liquid sample was collected. The dose rate through the drill string was 320 mR/hr. No problems with sampler valve. Valve was easy to open.

BX-103 Core 87 Field Blank (Riser #2)

Date: June 05, 1995
 Sample number: Field Blank
 Cask serial #: C1055
 Logbook #: WHC-N-1173
 Labcore #: S95T001006

Notes:

- * Hot Cell Temp 80.1 degrees F. Humidity 25%.
- * Check weights: 20 g = 20.00 g; 500 g = 499.98 g
- * Dose rate through the drill string was 0 mR/hr.
- * Expected sample length is 19 inches.
- * No liner liquid collected or observed.
- * Sampler valve closed before and after cutting cables.
- * Extruded sample and performed photography.

Sample information:

- * Collected approximately 280 mL of clear colorless drainable liquid, no solids observed or collected.

Subsample information:

- * Drainable Liquid: (jar #1)
BX-103 Core 87 Field Blank
 -Jar # 7139 (250 mL)
 -238.69 grams collected
- * Drainable Liquid: (jar #2)
BX-103 Core 87 Field Blank
 -Jar # 6798 (125 mL)
 -39.34 grams collected

Notes:

- * A total of 278.03 grams of drainable liquid was collected. The dose rate through the drill string was 0 mR/hr. No problems with sampler valve. Valve was easy to open.

WHC-SD-WM-DP-135, REV. 1

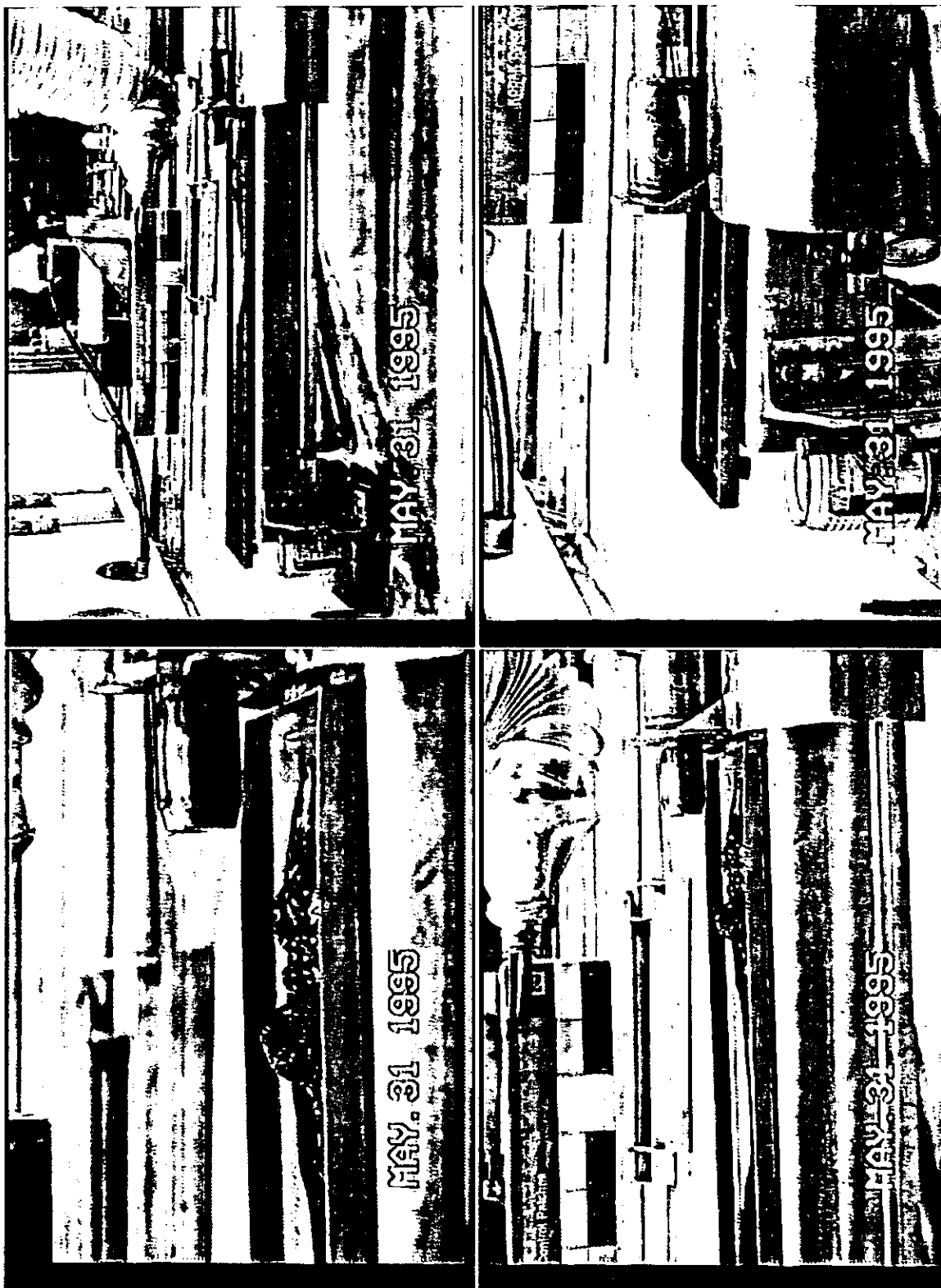
ATTACHMENT 4

PHOTOGRAPHS

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BX-103 Core 86 Seg #1

WHC-SD-WM-DP-135 Rev.1



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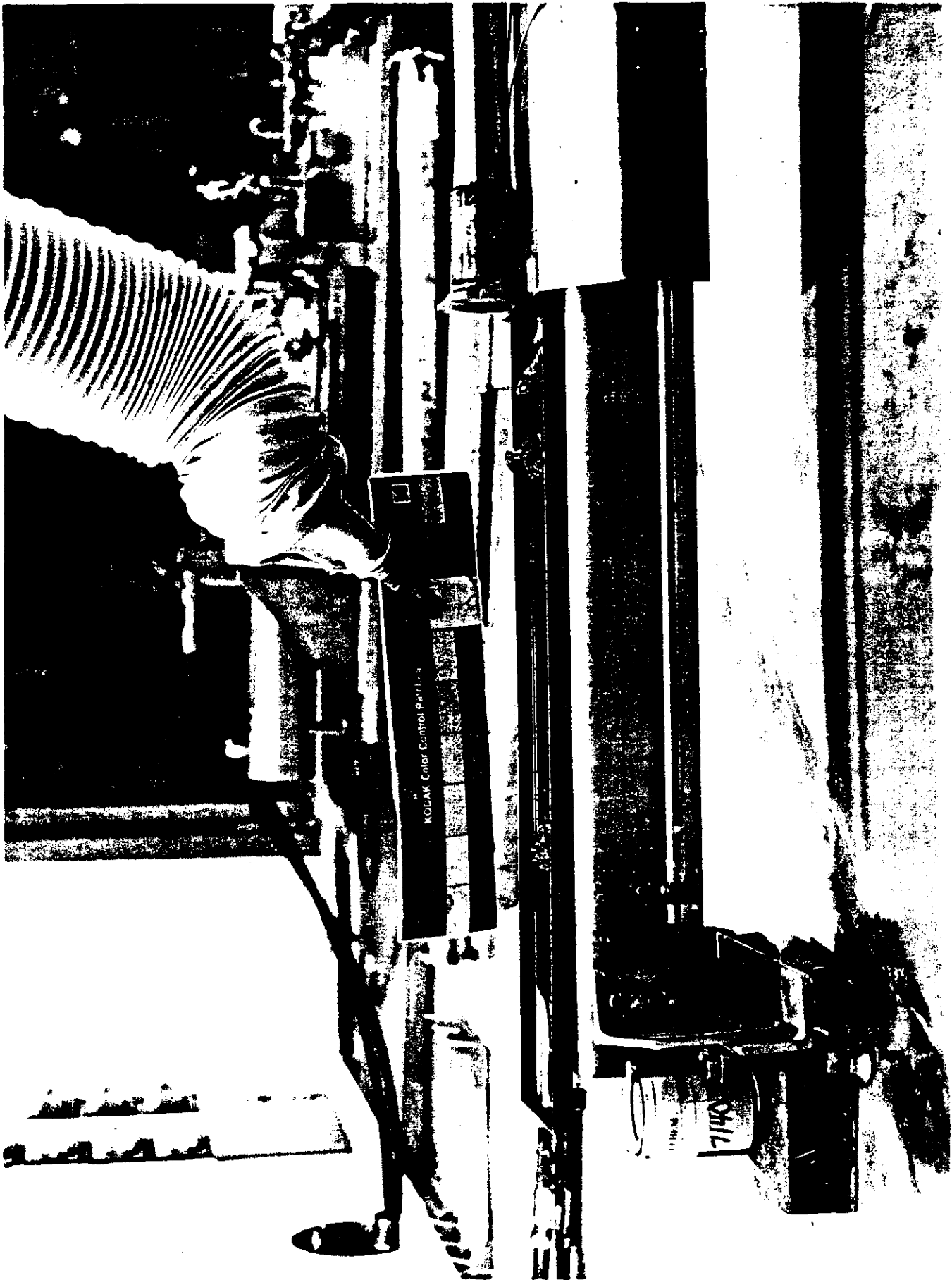
BX-103 Core 86 Seg #2



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Bx-103 Core 87 Segment #1

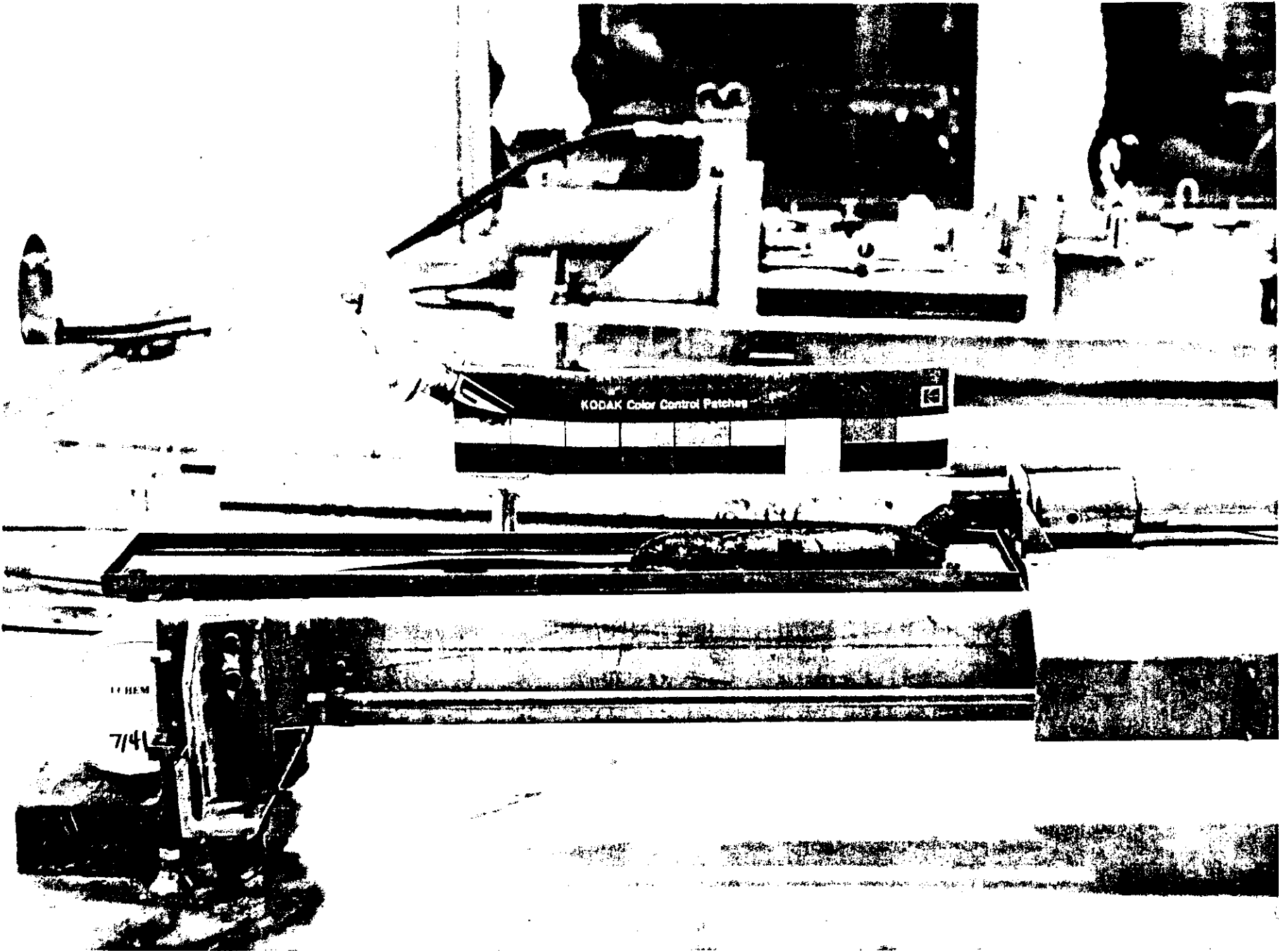
6-5-95



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BX-103 Core 87 Segment #2

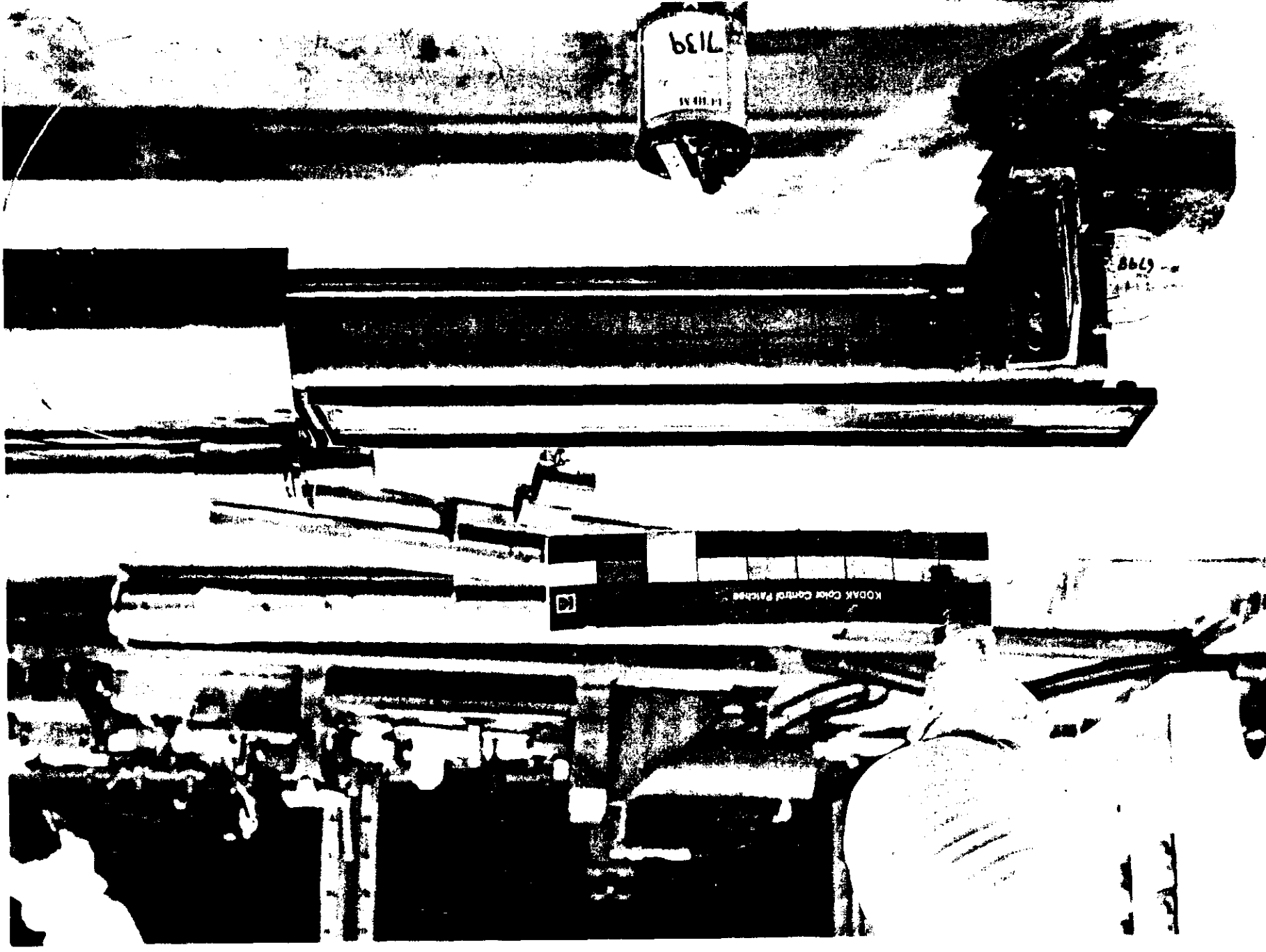
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6-5-95

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WHC-SD-WM-DP-135, REV. 1

ATTACHMENT 5

SUBSAMPLING WORKSHEETS

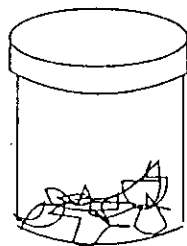
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Subsample Worksheet

Date: 8/5/96 ^{95 XP} _{8/5/95}

Tank: BX-103 Core: 86 Segment: 1 Riser: 7

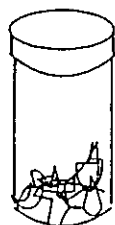
Homogenization
Time (Min.): n/a



Jar#: 6945
Jar/Vial size: 250 mL
Initial weight: 445.96 g
Final Weight: 371.54 g
Net Weight: 74.42 g

(after final subsample taken)

Start time:
Finish time:



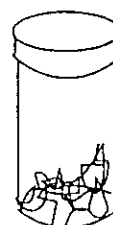
*Centrifuged
Drainable & pour
see bulk density
sheet attached*

Start time:
Finish time:



SGS 1001030

Start time:
Finish time:



Start time:
Finish time:



*

Jar#: 7654 6997
Jar/Vial size: 20 mL
Initial weight: 28.093 g
Final Weight: 37.733 g
Net Weight: 9.64 g

Jar#: 7183
Jar/Vial size: 40 mL
Initial weight: 25.18 g
Final Weight: 72.52 g
Net Weight: 47.34 g

Jar#: n/a 38
Jar/Vial size: mL
Initial weight: g
Final Weight: g
Net Weight: g

Jar#: n/a 38
Jar/Vial size: mL
Initial weight: g
Final Weight: g
Net Weight: g

* Special Instructions: Centrifuge approx. 10 mL and decant liquid into 20 mL vial. Discard
centrifuged solids.

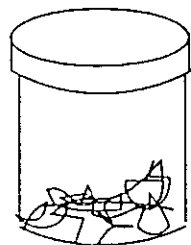
*Complete as file
6/5/95*

Subsample Worksheet

Date: 6/5/95

Tank: BX-103 Core: 86 Segment: 1 Riser: 7

Homogenization
Time (Min.): 10 min



Jar#: 6945 (lig.)
Jar/Vial size: 250 mL
Initial weight: 445.96 g
Final Weight: 371.54 g
Net Weight: 74.42 g

(after final subsample taken)

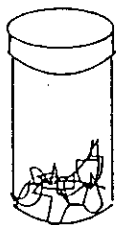
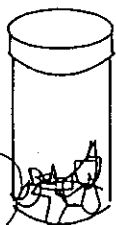
69

Start time:
Finish time:

Start time:
Finish time:

Start time:
Finish time:

Start time:
Finish time:



RK 6/5/95
See jar # 6947
need 15-16 g

destroyed jar 7054
RB 6/5/95

need 50-60 g

Jar#: 7054
Jar/Vial size: 20 mL
Initial weight: 27.338
Final Weight: 43.108
Net Weight: 15.77 g

Jar#: 7183
Jar/Vial size: 40 mL
Initial weight: 25.18 g
Final Weight: 72.528
Net Weight: 47.348

Jar#: n/a
Jar/Vial size: n/a mL
Initial weight: n/a g
Final Weight: n/a g
Net Weight: n/a g

Jar#: n/a
Jar/Vial size: n/a mL
Initial weight: n/a g
Final Weight: n/a g
Net Weight: n/a g

Special Instructions: _____

WHC-SD-WM-DP-135, REV. 1

Complete
20 Hrs 1/5/95

Requestor: RH FULLER
K BELL

Bulk Density Worksheet

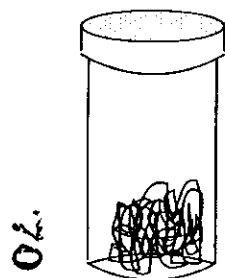
Date: 6/5/95

Tank: BX-103
Core: 86
Seg: 2 *rise #7*
Auger: NA

Tank: BX103
Core: 86
Seg: 1
Auger: NA *#7*

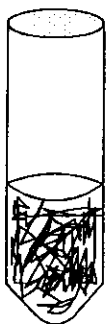
Start Time: NA
End Time: NA

Start Time: NA
End Time: NA



Homogenization
Time (Min.): NA

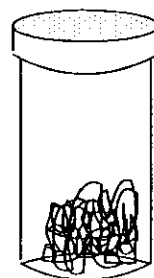
Jar#: 6947
Jar/Vial Size: 250 mL
Initial Weight: 245.50 g
Final Weight: 229.98 g
Net Weight: 15.52 g



Cone#: 6947
Final Vol: _____ mL
Initial Weight: 7.67 g
Final Weight: 22.95 g
Net Weight: 15.28 g

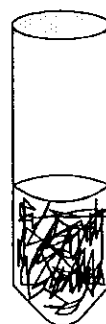
Appearance/Narrative:

add approx. 10 mL of sample. Pour
or decant supernate into vial DSS.
Complete and sheet.



Homogenization
Time (Min.): NA

Jar#: 6945
Jar/Vial Size: 250 mL
Initial Weight: 371.41 g
Final Weight: 359.12 g
Net Weight: 12.29 g



Cone#: 6945
Final Vol: _____ mL
Initial Weight: 7.68 g
Final Weight: 19.81 g
Net Weight: 12.13 g

Appearance/Narrative:

add same amount to this cone as
cone 6947. Decant liquid into 6997
(NAL).

Complete *6/5/95*

WHC-SD-WM-DP-135, REV. 1

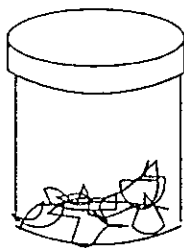
Subsample Worksheet

WHC-SD-WM-DP-135, REV. 1

Date: 6/5/95

Tank: BX-103 Core: 86 Segment: 1 Riser: 7

Homogenization
Time (Min.): 10 min



Jar#: 6796 (sludge)

Jar/Vial size: 250 mL

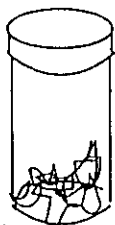
Initial weight: 162.95 g

Final Weight: 137.19 g

Net Weight: 25.76 g (after final subsample taken)

71

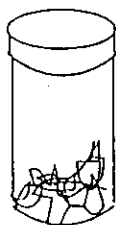
Start time:
Finish time:



need 7-8 g

Jar#: 7052
Jar/Vial size: 20 mL
Initial weight: 26.88 g
Final Weight: 33.67 g
Net Weight: 6.79 g

Start time:
Finish time:

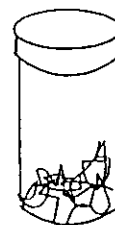


595700027

archive remainder

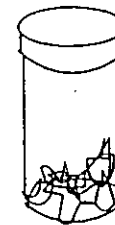
Jar#: 7181
Jar/Vial size: 40 mL
Initial weight: 25.07 g
Final Weight: 41.66 g
Net Weight: 16.59 g

Start time:
Finish time:



Jar#: n/a
Jar/Vial size: n/a mL
Initial weight: n/a g
Final Weight: n/a g
Net Weight: n/a g

Start time:
Finish time:



Jar#: n/a
Jar/Vial size: n/a mL
Initial weight: n/a g
Final Weight: n/a g
Net Weight: n/a g

Special Instructions: Jar #6796 was used in process R. Hunter 6/5/95

*Complete R. Hunter
6/5/95*

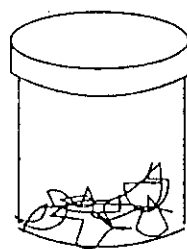
Subsample Worksheet

WHC-SD-MM-DP-135, REV. 1

Date: 6/5/95

Tank: BX-103 Core: 86 Segment: 2 Riser: 7

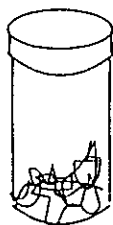
Homogenization
Time (Min.): n/a



Jar#: 6947 (Lig.)
Jar/Vial size: 250 mL
Initial weight: 245.54 g
Final Weight: 225.70 g
Net Weight: 19.84 g

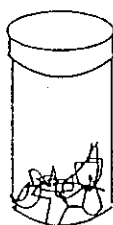
(after final subsample taken)

Start time:
Finish time:



*Centrifuged & decanted
ligor into 20 mL
Bottle density
sheet attached.*

Start time:
Finish time:

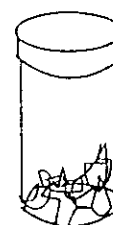


Archive remainder

Jar#: 7055
Jar/Vial size: 20 mL
Initial weight: 27.31 g
Final Weight: 37.36 g
Net Weight: 10.05 g

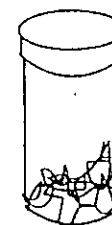
Jar#: 7184
Jar/Vial size: 40 mL
Initial weight: 25.09 g
Final Weight: 28.69 g
Net Weight: 3.60 g

Start time:
Finish time:



Jar#: n/a
Jar/Vial size: XB mL
Initial weight: g
Final Weight: g
Net Weight: g

Start time:
Finish time:



Jar#: n/a
Jar/Vial size: XB mL
Initial weight: g
Final Weight: g
Net Weight: g

*

Special Instructions: Collect 10 mL in a centrifuge tube and centrifuge. Decant ligor into 20 mL vial being careful not to transfer centrifuged solids. Discard solids.

Complete 20/100 6/5/95

WHC-SD-WM-DP-135, REV. 1

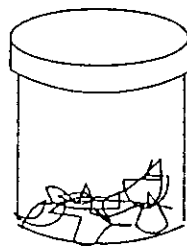
Complete RD. Hble 6/15/95

Subsample Worksheet

Date: 6/5/95

Tank: BX-103 Core: 86 Segment: 2 Riser: 7

Homogenization
Time (Min.): 5 min.



Jar#: 7138 (LH solid)

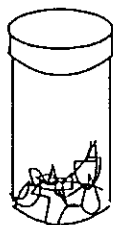
Jar/Vial size: 250 mL

Initial weight: 417.26 g

Final Weight: 348.38 g

Net Weight: 68.88 g (after final subsample taken)

Start time:
Finish time:



collect 7-8 g

Jar#: 7056

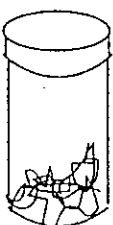
Jar/Vial size: 20 mL

Initial weight: 27.078

Final Weight: 35.47 g

Net Weight: 8.40 g

Start time:
Finish time:



collect 50-60 g

Jar#: 7185

Jar/Vial size: 40 mL

Initial weight: 25.218

Final Weight: 81.16 g

Net Weight: 55.95 g

Start time:
Finish time:



Jar#: n/a

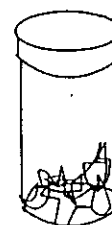
Jar/Vial size: n/a mL

Initial weight: n/a g

Final Weight: n/a g

Net Weight: n/a g

Start time:
Finish time:



Jar#: n/a

Jar/Vial size: n/a mL

Initial weight: n/a g

Final Weight: n/a g

Net Weight: n/a g

Special Instructions: _____

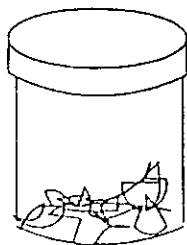
Complete R. H. H.
6/5/95

Subsample Worksheet

Date: 6/7/95

Tank: BX-103 Core: 87 Segment: 1 Riser: 2

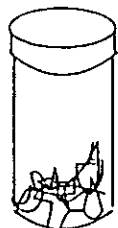
Homogenization
Time (Min.): n/a



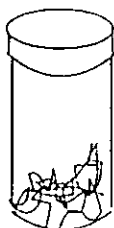
Jar#: 7140 (lig.)
Jar/Vial size: 250 mL
Initial weight: 437.01 g
Final Weight: 361.58 g
Net Weight: 75.43 g

(after final subsample taken)

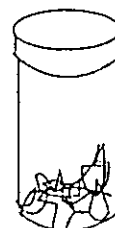
Start time:
Finish time:



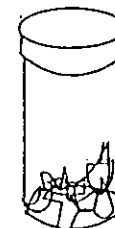
Start time:
Finish time:



Start time:
Finish time:



Start time:
Finish time:



52

collect 40-50 g for archive

* Jar#: 7059
Jar/Vial size: 20 mL
Initial weight: 26.99 g
Final Weight: 42.35 g
Net Weight: 15.36 g

Jar#: 7193
Jar/Vial size: 40 mL
Initial weight: 25.53 g
Final Weight: 74.67 g
Net Weight: 49.14 g

Jar#: n/a
Jar/Vial size: n/a mL
Initial weight: n/a g
Final Weight: n/a g
Net Weight: n/a g

Jar#: n/a
Jar/Vial size: n/a mL
Initial weight: n/a g
Final Weight: n/a g
Net Weight: n/a g

* Special Instructions: Centrifuge 13-15 ml of liquid and decant into 20ml vial. Discard
centrifuged solids. Less than .5 ml of solids (3% solids)

Bulk Density Worksheet

Requestor: K. Beel

Date: 6/7/95

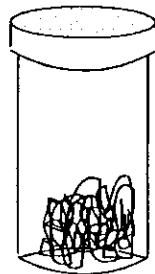
Tank: BX-103

Core: 87

Seg: 2

Auger: 2

Start Time: 11 AM
End Time: _____



Homogenization
Time (Min.): _____

Jar#: 7169

Jar/Vial Size: 40 mL

Initial Weight: 43.52 g

Final Weight: _____ g

Net Weight: _____ g



Cone#: 7169

Final Vol: 15 mL

Initial Weight: 7.66 g

Final Weight: _____ g

Net Weight: _____ g

Appearance/Narrative:

15 mL of liquid sample
was taken from 40 mL vial to
15 mL cone for centrifuge.

Volume of Solids = 20.5 mL ^{RRP 6/7/95} _{grams} _{mls}

Volume of liquid = 15 mL _g _{mls}

< than a half mL R.H. 6/7/95

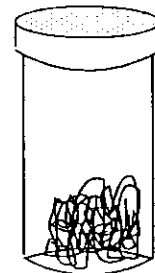
Tank: BX-103

Core: 87

Seg: 1

Auger: 2

Start Time: 11 AM
End Time: _____



Homogenization
Time (Min.): _____

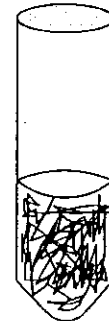
Jar#: 7140

Jar/Vial Size: 250 mL

Initial Weight: 437.01 g

Final Weight: _____ g

Net Weight: _____ g



Cone#: 7140

Final Vol: 15 mL

Initial Weight: 7.75 g

Final Weight: _____ g

Net Weight: _____ g

Appearance/Narrative:

Took 15 mL of liquid sample from
parent Jar # 7140 for centrifuge.

Volume of Solids = 20.5 mL _g _{mls}

Volume of liquid = 15 mL _g _{mls}

< than a half mL R.H. 6/7/95

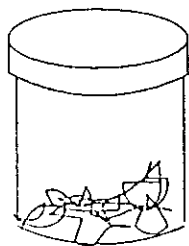
WHC-SD-WM-DP-135, REV. 1

Subsample Worksheet

Date: _____

Tank: BX-103 Core: 87 Segment: 1 Riser: 2

Homogenization
Time (Min.): 5 min



Jar#: 7070 (UH. Mudge)

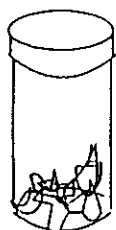
Jar/Vial size: 125 mL used in process

Initial weight: 199.61 g

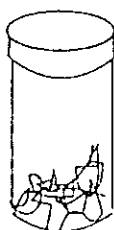
Final Weight: 135.02 g

Net Weight: 64.59 g (after final subsample taken)

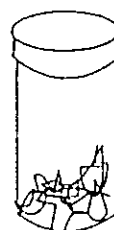
Start time:
Finish time:



Start time:
Finish time:



Start time:
Finish time:



Start time:
Finish time:



27

collect 7-8 g

Jar#: 7061

Jar/Vial size: 20 mL

Initial weight: 27.23 g

Final Weight: 36.07 g

Net Weight: 8.84 g

archive remainder

Jar#: 7195

Jar/Vial size: 40 mL

Initial weight: 25.21 g

Final Weight: 76.55 g

Net Weight: 51.34 g

Jar#: n/a

Jar/Vial size: n/a mL

Initial weight: n/a g

Final Weight: n/a g

Net Weight: n/a g

Jar#: n/a

Jar/Vial size: n/a mL

Initial weight: n/a g

Final Weight: n/a g

Net Weight: n/a g

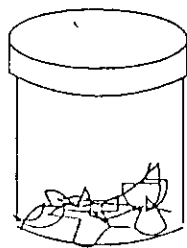
Special Instructions: #7070 Has a Consistency of Sherry
7070 was used in process

Subsample Worksheet

Date: _____

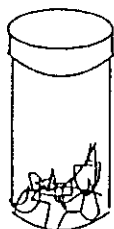
Tank: BX-103 Core: 87 Segment: 1 Riser: 2

Homogenization
Time (Min.): 5 min



Jar#: 6799 (LH sludge) *Sample is like soft mud & slurry like, use in process*
Jar/Vial size: 125 mL
Initial weight: 154.779 g
Final Weight: 134.63 g
Net Weight: 20.149 g (after final subsample taken)

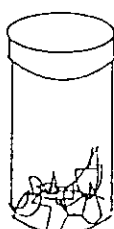
Start time:
Finish time:



collect 7-8g

Jar#: 7057
Jar/Vial size: 20 mL
Initial weight: 27.219 g
Final Weight: 34.49 g
Net Weight: 7.27 g

Start time:
Finish time:



archive remainder

Jar#: 7192
Jar/Vial size: 40 mL
Initial weight: 25.20 g
Final Weight: 32.43 g
Net Weight: 7.23 g

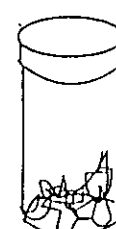
Start time:
Finish time:



n/a
7/8

Jar#: _____
Jar/Vial size: _____ mL
Initial weight: _____ g
Final Weight: _____ g
Net Weight: _____ g

Start time:
Finish time:



n/a
7/8

Jar#: _____
Jar/Vial size: _____ mL
Initial weight: _____ g
Final Weight: _____ g
Net Weight: _____ g

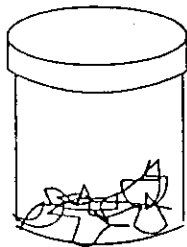
Special Instructions: #6799 *asc 6/7/95*
Sample 6799 is like soft mud, slurry like
process *Sample 6799 used in process*

Subsample Worksheet

Date: 6/7/95

Tank: BX-103 Core: 87 Segment: 2 Riser: 2

Homogenization
Time (Min.):



Jar#: 7169 used in Process

Jar/Vial size: 40 mL

Initial weight: 43.52 g

Final Weight: 26.56 g

Net Weight: 16.96 g

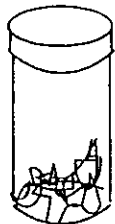
(after final subsample taken)

Start time:
Finish time:

Start time:
Finish time:

Start time:
Finish time:

Start time:
Finish time:



62

511700044

*

Jar#: 750 7058

Jar/Vial size: 20 mL

Initial weight: 27.15 g

Final Weight: 43.46 g

Net Weight: 16.31 g

archive remainder

Jar#: 7169

Jar/Vial size: 40 mL

Initial weight: g

Final Weight: g

Net Weight: g



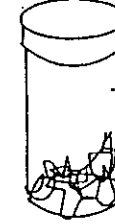
Jar#: n/c

Jar/Vial size: n/c mL

Initial weight: g

Final Weight: g

Net Weight: g



Jar#: n/a

Jar/Vial size: n/a mL

Initial weight: g

Final Weight: g

Net Weight: g

*

Special Instructions:

#7169 Centrifuge 10 ml and decant into 20 ml vial. Discard

centrifuged solids less than .5 mL of solids (3% solids)

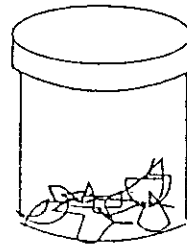
WHC-SD-WM-DP-135, REV. 1

Subsample Worksheet

Date: 6/7/95

Tank: BX-103 Core: 87 Segment: 2 u.H. Riser: 2

Homogenization
Time (Min.): _____



Jar#: 7141
Jar/Vial size: 250 mL
Initial weight: 466.44 g
Final Weight: 373.53 g
Net Weight: 92.91 g

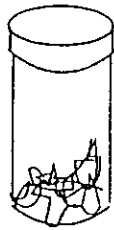
(after final subsample taken)

Start time:
Finish time:

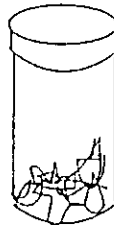
Start time:
Finish time:

Start time:
Finish time:

Start time:
Finish time:



collect 7-8 g
Jar#: 7060
Jar/Vial size: 20 mL
Initial weight: 27.51 g
Final Weight: 37.90 g
Net Weight: 10.39 g



archive 50-60 g
Jar#: 7194
Jar/Vial size: 40 mL
Initial weight: 25.25 g
Final Weight: 94.26 g
Net Weight: 69.01 g



~~Jar#: n/a
Jar/Vial size: n/a mL
Initial weight: n/a g
Final Weight: n/a g
Net Weight: n/a g~~



~~Jar#: n/a
Jar/Vial size: n/a mL
Initial weight: n/a g
Final Weight: n/a g
Net Weight: n/a g~~

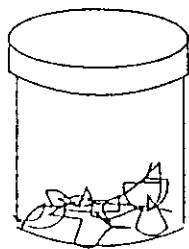
Special Instructions: _____

Subsample Worksheet

Date: 6/1/95

Tank: BX-103 Core: 87 Segment: field blank Riser: 2

Homogenization
Time (Min.): → L'Q



Jar#: 6798 (field blank) used in process
Jar/Vial size: 125 mL
Initial weight: 169.46 g
Final Weight: 130.75 g
Net Weight: 38.71 g (after final subsample taken)

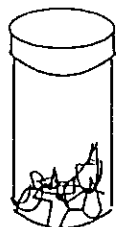
Start time:
Finish time:

Start time:
Finish time:

Start time:
Finish time:

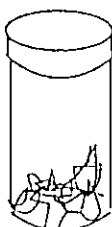
Start time:
Finish time:

82



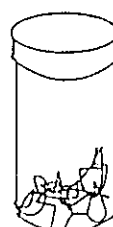
Collect 30-40 g

Jar#: 7191
Jar/Vial size: 40 mL
Initial weight: 45.472 g
Final Weight: 83.49 g
Net Weight: 38.02 g



n/a

Jar#: n/a
Jar/Vial size: mL
Initial weight: g
Final Weight: g
Net Weight: g



n/c
n/B

Jar#: n/c
Jar/Vial size: mL
Initial weight: g
Final Weight: g
Net Weight: g



n/a
n/B

Jar#: n/a
Jar/Vial size: mL
Initial weight: g
Final Weight: g
Net Weight: g

Special Instructions: for #6798 used in process (6-7-95)

WHC-SD-WM-DP-135, REV. 1

ATTACHMENT 6

LABCORE SAMPLE NUMBERS AND TESTS

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Tank Characterization Program
PO Box 1970
Richland, WA 99352
Attn: Dave Bratzel

Customer Code: TCP
Group#: 95000080
Project#: BX-103
Proj Mgr: KEVIN BELL
Phone: 373-1629

The following samples were received from you on 05/26/95. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using 222-S Analytical Laboratory.

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date
S95T001012	BX103 SEG1	LIN-LIQ V7173 HOLDPJC	Liquid, or handle as liquid	06/05/95
S95T001013	BX103 SEG2	LIN-LIQ V7179 HOLDPJC	Liquid, or handle as liquid	06/05/95
S95T001014	BX103 SEG1	DRLIQ V6945 HOLDPJC	Liquid, or handle as liquid	06/05/95
S95T001015	BX103 SEG2	DRLIQ V6947 HOLDPJC	Liquid, or handle as liquid	06/05/95
S95T001019	BX103 SEG1	DRLIQ DIR V6997 DOSE-01	Liquid, or handle as liquid	06/05/95
S95T001020	BX103 C86 SEG2	DRLIQ DIR V7055 DOSE-01	Liquid, or handle as liquid	06/05/95
S95T001030	BX103 SEG1	DRLIQ ARCH V7183 ARCHIVO1	Liquid, or handle as liquid	06/05/95
S95T001031	BX103 SEG2	DRLIQ ARCH V7184 ARCHIVO1	Liquid, or handle as liquid	06/05/95
S95T001032	BX103 SEG1	DRLIQ FIL V6997 DOSE-02 DSC-03	Liquid, or handle as liquid	06/05/95
S95T001033	BX103 SEG2	DRLIQ FIL V7055 DOSE-02 DSC-03	Liquid, or handle as liquid	06/05/95
S95T000970	BX103 C86 SEG 1	DLIQVOL1 DLIQWT01 NOTEBOOK ORGVOL01	Solid, or handle as if solid	05/26/95
S95T000971	BX103 C86 SEG 2	DLIQVOL1 DLIQWT01 NOTEBOOK ORGVOL01	Solid, or handle as if solid	05/26/95
S95T001016	BX103 SEG1	UH V6796 HOLDPJC	Solid, or handle as if solid	06/05/95
S95T001017	BX103 SEG2	LH V7138 HOLDPJC	Solid, or handle as if solid	06/05/95

Tank Characterization Program
PO Box 1970
Richland, WA 99352
Attn: Dave Bratzel

Customer Code: TCP
Group#: 95000080
Project#: BX-103
Proj Mgr: KEVIN BELL
Phone: 373-1629

WHC-SD-WM-DP-135, REV. 1

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date
S95T001018	BX103 SEG2 UH V6797	HOLDPJC	Solid, or handle as if solid	06/05/95
S95T001021	BX103 SEG1 UH DIR V7052	DOSE-01 DSC-01 DSC-02 TGA-01	Solid, or handle as if solid	06/05/95
S95T001022	BX103 SEG2 LH DIR V7056	DOSE-01 DSC-01 DSC-02 TGA-01	Solid, or handle as if solid	06/05/95
S95T001023	BX103 C86 SEG2 UH DIR V7053	DOSE-01 DSC-01 TGA-01	Solid, or handle as if solid	06/05/95
S95T001024	BX103 SEG1 UH FUS V7052	@ALPHA01 DOSE-02 FUSION01	Solid, or handle as if solid	06/05/95
S95T001025	BX103 C86 SEG2 LH FUS V7056	@ALPHA01 DOSE-02 FUSION01	Solid, or handle as if solid	06/05/95
S95T001026	BX103 C86 SEG2 UH FUS V7053	@ALPHA01 DOSE-02 FUSION01	Solid, or handle as if solid	06/05/95
S95T001027	BX103 SEG1 UH ARCH V7181	ARCHIV01	Solid, or handle as if solid	06/05/95
S95T001028	BX103 C86 SEG2 LH ARCH V7185	ARCHIV01	Solid, or handle as if solid	06/05/95
S95T001029	BX103 C86 SEG2 UH ARCH V7182	ARCHIV01	Solid, or handle as if solid	06/05/95

Test Acronym Description

Test Acronym	Description
@ALPHA01	Alpha of Digested Solid
ARCHIV01	Archive aliq of sample/hotcell
DLIQVOL1	Drainable Liquid Recovrd - Vol
DLIQWT01	Drainable Liquid Recoverd - Wt
DOSE-01	Dose Rate(hotcell) in mrad/hr
DOSE-02	Dose Rate(samp prep)in mrad/hr
DSC-01	DSC Exotherm using Mettler
DSC-02	DSC Exotherm Dry Calculated
DSC-03	DSC Exotherm on Perkin Elmer
EST.G/ML	Estimated g/mL - Calculated
EXTRUD01	Extrusion of a Segment
FILTER02	Filter Liquid / sample prep
FUSION01	Fusion with KOH
HOLDPJC	Hold for Proj Coord Attention
LLIQWT01	Liner Liquid Recoverd - Weight
NOTEBOOK	Notebook with source data
ORGVOL01	Organic Vol Present / hotcell
PCREVIEW	Review by Project Coordinator
SLDVOL01	Solids Recovered - Volume
SLDWT-01	Solids Recovered - Weight

Tank Characterization Program
PO Box 1970
Richland, WA 99352
Attn: Dave Bratzel

Customer Code: TCP WHC-SD-WM-OP. 135, REV. 1
Group#: 95000080
Project#: BX-103
Proj Mgr: KEVIN BELL
Phone: 373-1629

Test Acronym Description

Test Acronym	Description
TGA-01	% Water by TGA using Mettler
TGA-03	% Water by TGA on Perkin Elmer

222-S Analytical Laboratory
P.O. BOX 1970 T6-06, Richland, WA 99352
PHONE: (509) 373-4225/FAX: (509) 373-0545

ACKNOWLEDGMENT OF SAMPLES RECEIVED

WHC-SD-WM-DP-135, REV. 1

Tank Characterization Program
PO Box 1970
Richland, WA 99352
Attn: Dave Bratzel

Customer Code: TCP
Group#: 95000084
Project#: BX-103
Proj Mgr: KEVIN BELL
Phone: 373-1629

The following samples were received from you on 06/01/95. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using 222-S Analytical Laboratory.

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date
S95T001034	BX103 C87	SEG1 DIR DRLIQ V7059 DOSE-01	Liquid, or handle as liquid	06/05/95
S95T001035	BX103 C87	SEG2 DIR DRLIQ V7058 DOSE-01	Liquid, or handle as liquid	06/05/95
S95T001036	BX103 C87	FB DRLIQ V7191 DOSE-01 DSC-03	Liquid, or handle as liquid	06/05/95
S95T001043	BX103 C87	SEG1 DRLIQ FIL V7059 DOSE-02 DSC-01	Liquid, or handle as liquid	06/05/95
S95T001044	BX103 C87	SEG2 DRLIQ FIL V7058 DOSE-02 DSC-01	Liquid, or handle as liquid	06/05/95
S95T001523	BX103 C87	SEG1 DRLIQ J7140	Liquid, or handle as liquid	05/30/95
S95T001526	BX103 C87	SEG2 DRLIQ V7169	Liquid, or handle as liquid	05/30/95
S95T001528	BX103 C87	FIELD BLANK J6798	Liquid, or handle as liquid	05/30/95
S95T001529	BX103 C87	FIELD BLANK J7139	Liquid, or handle as liquid	05/30/95
S95T001530	BX103 C87	SEG1 LIQ ARCH V7193 ARCHIV01	Liquid, or handle as liquid	05/30/95
S95T001004	BX103 C87	SEG 1 DLIQVOL1 DLIQWT01 NOTEBOOK ORGVOL01	Solid, or handle as if solid	05/30/95
S95T001005	BX103 C87	SEG 2 DLIQVOL1 DLIQWT01 NOTEBOOK ORGVOL01	Solid, or handle as if solid	05/30/95
S95T001006	BX103 C87	FIELD BLANK DLIQVOL1 DLIQWT01 NOTEBOOK ORGVOL01	Solid, or handle as if solid	05/30/95
S95T001037	BX103 C87	SEG1 LH DIR V7057 DOSE-01 DSC-01	Solid, or handle as if solid	06/05/95
		DSC-02 TGA-01		

Tank Characterization Program
PO Box 1970
Richland, WA 99352
Attn: Dave Bratzel

Customer Code: TCP
Group#: 95000084
Project#: BX-103
Proj Mgr: KEVIN BELL
Phone: 373-1629

WHC-SD-WM-DP-135, REV. 1

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date
S95T001038	BX103 C87 SEG1 UH DIR V7061	DOSE-01 DSC-01 DSC-02 TGA-01	Solid, or handle as if solid	06/05/95
S95T001039	BX103 C87 SEG2 UH DIR V7060	DOSE-01 DSC-01 TGA-01 TGA-01 WATER-01	Solid, or handle as if solid	06/05/95
S95T001040	BX103 C87 SEG2 UH FUS V7060	@ALPHA01 DOSE-02 FUSION01	Solid, or handle as if solid	06/05/95
S95T001041	BX103 C87 SEG1 UH FUS V7061	@ALPHA01 DOSE-02 FUSION01	Solid, or handle as if solid	06/05/95
S95T001042	BX103 C87 SEG1 LH FUS V7057	@ALPHA01 DOSE-02 FUSION01	Solid, or handle as if solid	06/05/95
S95T001524	BX103 C87 SEG1 LH J6799		Solid, or handle as if solid	05/30/95
S95T001525	BX103 C87 SEG1 UH J7070		Solid, or handle as if solid	05/30/95
S95T001527	BX103 C87 SEG2 UH J7141		Solid, or handle as if solid	05/30/95
S95T001531	BX103 C87 SEG1 LH ARCH V7192	ARCHIVO1	Solid, or handle as if solid	05/30/95
S95T001532	BX103 C87 SEG1 UH ARCH V7195	ARCHIVO1	Solid, or handle as if solid	05/30/95
S95T001533	BX103 C87 SEG2 UH ARCH V7194	ARCHIVO1	Solid, or handle as if solid	05/30/95

Test Acronym Description

Test Acronym	Description
@ALPHA01	Alpha of Digested Solid
ARCHIVO1	Archive aliq of sample/hotcell
DLIQVOL1	Drainable Liquid Recovrd - Vol
DLIQWT01	Drainable Liquid Recoverd - Wt
DOSE-01	Dose Rate(hotcell) in mrad/hr
DOSE-02	Dose Rate(samp prep) in mrad/hr
DSC-01	DSC Exotherm using Mettler
DSC-02	DSC Exotherm Dry Calculated
DSC-03	DSC Exotherm on Perkin Elmer
EST.G/ML	Estimated g/mL - Calculated
EXTRUD01	Extrusion of a Segment
FILTER02	Filter Liquid / sample prep
FUSION01	Fusion with KOH
LLIQWT01	Liner Liquid Recoverd - Weight
NOTEBOOK	Notebook with source data
ORGVOL01	Organic Vol Present / hotcell
PCREVIEW	Review by Project Coordinator
SLDVOL01	Solids Recovered - Volume

Tank Characterization Program
PO Box 1970
Richland, WA 99352
Attn: Dave Bratzel

Customer Code: TCP WHC-SD-WM-OP-135, REV. 1
Group#: 95000084
Project#: BX-103
Proj Mgr: KEVIN BELL
Phone: 373-1629

Test Acronym Description

Test Acronym	Description
SLDWT-01	Solids Recovered - Weight
TGA-01	% Water by TGA using Mettler
WATER-01	% Water by Gravimetric

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WHC-SD-WM-DP-135, REV. 1

SAMPLE HANDLING

LABCORE Data Entry Template for Worklist# 1462

Analyst: EC Instrument: BA000 Book # N/A

Method: LO-160-103 Rev/Mod A7

Worklist Comment: BX-103 C86 Segment #1 Riser 7 Extrusion

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01				EXTRUD01	SOLID	<u>20g</u>	<u>20.00</u>	<u>N/A</u>	
		2	INSTCHK02				EXTRUD01	SOLID	<u>500g</u>	<u>499.98</u>	<u>N/A</u>	
95000080	BX-103	3	SAMPLE	S95T000970	0		DLIQVOL1	SOLID	<u>N/A</u>	<u>210</u>		mL
95000080	BX-103	4	SAMPLE	S95T000970	0		DLIQWT01	SOLID	<u>N/A</u>	<u>221.71</u>		g
95000080	BX-103	5	SAMPLE	S95T000970	0		EST.G/ML	SOLID	<u>N/A</u>	<u>1</u>		g/mL
95000080	BX-103	6	SAMPLE	S95T000970	0		EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>		
95000080	BX-103	7	SAMPLE	S95T000970	0		LLIQWT01	SOLID	<u>N/A</u>	<u>LS</u>		g
95000080	BX-103	8	SAMPLE	S95T000970	0		NOTEBOOK	SOLID	<u>N/A</u>	<u>N-1173</u>		
95000080	BX-103	9	SAMPLE	S95T000970	0		SLDVOL01	SOLID	<u>N/A</u>	<u>33</u>		mL
95000080	BX-103	10	SAMPLE	S95T000970	0		SLDWT-01	SOLID	<u>N/A</u>	<u>33</u>		g
95000080	BX-103	11	SAMPLE	S95T000970	0		ORGVOL01	SOLID	<u>N/A</u>	<u>C</u>		mL

Final page for worklist # 1462

SE 6-1-95
Analyst Signature Date

EAC 6-1-95
Analyst Signature Date

Data Entry Comments:

Reviewed by RKZ
6/2/95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 1463

Analyst: EC Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod A-7

Worklist Comment: BX-103 C86 Segment #2 Riser 7 Extrusion

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20g</u>	<u>19.99</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUD01	SOLID	<u>500g</u>	<u>499.78</u>	<u>N/A</u>	
95000080	BX-103	3 SAMPLE	S95T000971	0	DLIQVOL1	SOLID	<u>N/A</u>	<u>20</u>		mL
95000080	BX-103	4 SAMPLE	S95T000971	0	DLIQWT01	SOLID	<u>N/A</u>	<u>21</u>		g
95000080	BX-103	5 SAMPLE	S95T000971	0	EST.G/ML	SOLID	<u>N/A</u>	<u>1</u>		g/mL
95000080	BX-103	6 SAMPLE	S95T000971	0	EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>		
95000080	BX-103	7 SAMPLE	S95T000971	0	LLIQWT01	SOLID	<u>N/A</u>	<u>55</u>		g
95000080	BX-103	8 SAMPLE	S95T000971	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>N-1173</u>		
95000080	BX-103	9 SAMPLE	S95T000971	0	SLDVOL01	SOLID	<u>N/A</u>	<u>282</u>		mL
95000080	BX-103	10 SAMPLE	S95T000971	0	SLDWT-01	SOLID	<u>N/A</u>	<u>282</u>		g
95000080	BX-103	11 SAMPLE	S95T000971	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		mL

Final page for worklist # 1463

EC 6-1-95
Analyst Signature Date

EC 6-1-95
Analyst Signature Date

Data Entry Comments:

*Reviewed by
RK-
6/2/95*

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 1479

Analyst: EC Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod A-2

Worklist Comment: BX-103 C87 Segment # 1 Riser 2 Extrusion

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	INSTCHK01				EXTRUD01	SOLID	<u>20g</u>	<u>19.99</u>	<u>N/A</u>	
		2	INSTCHK02				EXTRUD01	SOLID	<u>500g</u>	<u>499.78</u>	<u>N/A</u>	
95000084	BX-103	3	SAMPLE	S95T001004	0		DLIQVOL1	SOLID	<u>N/A</u>	<u>190</u>		mL
95000084	BX-103	4	SAMPLE	S95T001004	0		DLIQWT01	SOLID	<u>N/A</u>	<u>214</u>		g
95000084	BX-103	5	SAMPLE	S95T001004	0		EST.G/ML	SOLID	<u>N/A</u>	<u>1.13</u>		g/mL
95000084	BX-103	6	SAMPLE	S95T001004	0		EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>		
95000084	BX-103	7	SAMPLE	S95T001004	0		LLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
95000084	BX-103	8	SAMPLE	S95T001004	0		NOTEBOOK	SOLID	<u>N/A</u>	<u>N-1173</u>		
95000084	BX-103	9	SAMPLE	S95T001004	0		SLDVOL01	SOLID	<u>N/A</u>	<u>97</u>		mL
95000084	BX-103	10	SAMPLE	S95T001004	0		SLDWT-01	SOLID	<u>N/A</u>	<u>94</u>		g
95000084	BX-103	11	SAMPLE	S95T001004	0		ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		mL

Final page for worklist # 1479

EAL
Analyst Signature Date 6-7-95

EAL
Analyst Signature Date 6-7-95

Data Entry Comments:

*Reviewed by
RPT/ML
6/7/95*

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 1480

Analyst: EC Instrument: BA000 Book # N/A

Method: LO-160-103 Rev/Mod A-7

Worklist Comment: BX-103 C87 Segment # 2 Riser 2 Extrusion

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20g</u>	<u>19.97</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUD01	SOLID	<u>500g</u>	<u>499.98</u>	<u>N/A</u>	
95000084	BX-103	3 SAMPLE	S95T001005	0	DLIQVOL1	SOLID	<u>N/A</u>	<u>15</u>		mL
95000084	BX-103	4 SAMPLE	S95T001005	0	DLIQWT01	SOLID	<u>N/A</u>	<u>18</u>		g
95000084	BX-103	5 SAMPLE	S95T001005	0	EST.G/ML	SOLID	<u>N/A</u>	<u>1.2</u>		g/mL
95000084	BX-103	6 SAMPLE	S95T001005	0	EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>		
95000084	BX-103	7 SAMPLE	S95T001005	0	LLIQWT01	SOLID	<u>N/A</u>	<u>55</u>		g
95000084	BX-103	8 SAMPLE	S95T001005	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>N-1173</u>		
95000084	BX-103	9 SAMPLE	S95T001005	0	SLDVOL01	SOLID	<u>N/A</u>	<u>244</u>		mL
95000084	BX-103	10 SAMPLE	S95T001005	0	SLDWT-01	SOLID	<u>N/A</u>	<u>244</u>		g
95000084	BX-103	11 SAMPLE	S95T001005	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		mL

Final page for worklist # 1480

EC 6-7-95
Analyst Signature Date

EC 6-7-95
Analyst Signature Date

Data Entry Comments:

Reviewed by
RK full
6/14/95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 1478

Analyst: EC Instrument: BA000 Book # NA

Method: LO-160-103 Rev/Mod A-7

Worklist Comment: BX-103 C87 Field Blank Riser 2 Extrusion

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20</u>	<u>20.00</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUD01	SOLID	<u>500</u>	<u>499.98</u>	<u>N/A</u>	
95000084	BX-103	3 SAMPLE	S95T001006	0	DLIQVOL1	SOLID	<u>N/A</u>	<u>280</u>	<u>278.03</u>	ml
95000084	BX-103	4 SAMPLE	S95T001006	0	DLIQWT01	SOLID	<u>N/A</u>	<u>280</u>	<u>278.03</u>	g
95000084	BX-103	5 SAMPLE	S95T001006	0	EST.G/ML	SOLID	<u>N/A</u>	<u>1</u>		g/ml
95000084	BX-103	6 SAMPLE	S95T001006	0	EXTRUD01	SOLID	<u>N/A</u>	<u>complete</u>		
95000084	BX-103	7 SAMPLE	S95T001006	0	LLIQWT01	SOLID	<u>N/A</u>	<u>0</u>		g
95000084	BX-103	8 SAMPLE	S95T001006	0	NOTEBOOK	SOLID	<u>N/A</u>	<u>WHC-N-1173</u>		
95000084	BX-103	9 SAMPLE	S95T001006	0	SLDVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml
95000084	BX-103	10 SAMPLE	S95T001006	0	SLDWT-01	SOLID	<u>N/A</u>	<u>0</u>		g
95000084	BX-103	11 SAMPLE	S95T001006	0	ORGVOL01	SOLID	<u>N/A</u>	<u>0</u>		ml

Final page for worklist # 1478

EC 6-7-95
Analyst Signature Date

EC 6-7-95
Analyst Signature Date

Data Entry Comments:

Reviewed by RK Fuller 6/7/95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist#

1832

Analyst: RK7 Instrument: BA000 Book # _____

Method: LO-160-103 Rev/Mod A-7

Worklist Comment: BX-103 Archive Samples

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>20</u>	<u>30.00</u>	<u>N/A</u>	
		2 INSTCHK02			EXTRUD01	SOLID	<u>500</u>	<u>444.75</u>	<u>N/A</u>	
95000080	BX-103	3 SAMPLE	S95T001030	0 X	<u>7183</u> ARCHIV01	LIQUID	<u>N/A</u>	<u>47.3</u>		g
95000080	BX-103	4 SAMPLE	S95T001031	0 X	<u>7184</u> ARCHIV01	LIQUID	<u>N/A</u>	<u>3.6</u>		g
95000080	BX-103	5 SAMPLE	S95T001027	0 X	<u>7181</u> ARCHIV01	SOLID	<u>N/A</u>	<u>16.5</u>		g
95000080	BX-103	6 SAMPLE	S95T001028	0 X	<u>7185</u> ARCHIV01	SOLID	<u>N/A</u>	<u>55.7</u>		g
95000080	BX-103	7 SAMPLE	S95T001029	0 X	<u>7182</u> ARCHIV01	SOLID	<u>N/A</u>	<u>64.8</u>		g

Final page for worklist #

1832

Keith Fuller 7/14/95
Analyst Signature Date

Keith Fuller 7/14/95
Analyst Signature Date

Data Entry Comments:

Reviewed by RK Fuller 7/14/95

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

worklistrpt Version 2.1 05/15/95
08/18/95 15:00

WHC-SD-WM-OP-135, REV. 1

Page:

LABCORE Data Entry Template for Worklist#

2049

Analyst: ABC Instrument: BA000 Book # _____Method: LO-160-103 Rev/Mod A-7

Worklist Comment: BX-103 C87 SEG 1&2 UH&LH SOLIDS&DRAINABLE LIQUID ARCHIVES.

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 INSTCHK01			EXTRUD01	SOLID	<u>22</u>	<u>19.99</u>	N/A	
		2 INSTCHK02			EXTRUD01	SOLID	<u>500</u>	<u>499.98</u>	N/A	
95000084	BX-103	3 SAMPLE	895T001531	0 X	7192 ARCHIV01	SOLID	N/A	<u>7.20</u>		g
95000084	BX-103	4 SAMPLE	895T001532	0 X	7195 ARCHIV01	SOLID	N/A	<u>51.3</u>		g
95000084	BX-103	5 SAMPLE	895T001533	0 X	7194 ARCHIV01	SOLID	N/A	<u>69.0</u>		g
95000084	BX-103	6 SAMPLE	895T001530	0 X	7193 ARCHIV01	LIQUID	N/A	<u>49.1</u>		g

Final page for worklist #

2049

Alan Campbell 8-18-95
Analyst Signature DateAlan Campbell 8-18-95
Analyst Signature DateBatch # 95002115
95002117

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number,
R = Replicate Number, A = Aliquot Code.